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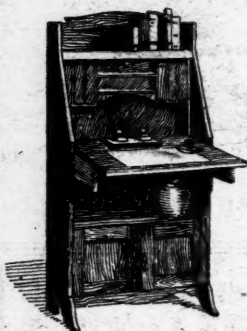
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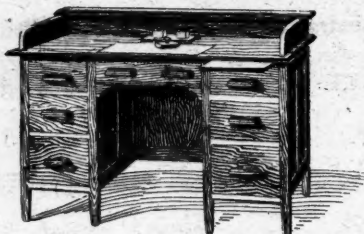
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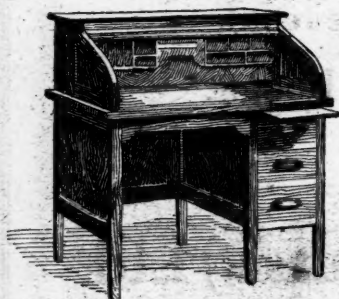
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THE MEDICAL JOURNAL OF AUSTRALIA.

VOL. I.—8TH YEAR.

SYDNEY: SATURDAY, FEBRUARY 19, 1921.

No. 8.

ERYTHROEDEMA.¹

By A. Jeffreys Wood, M.D. (Melb.),

Honorary Medical Officer, Children's Hospital, Melbourne.

To Dr. Swift, of Adelaide, belongs the credit of having been the first medical man to describe this condition as it is seen in children. His paper read at the tenth session of the Australasian Medical Congress at Auckland, New Zealand, in 1914, was the first attempt to tabulate the peculiar sets of symptoms that he has grouped together under the term erythroedema.

Being interested in his paper, I wrote to Dr. Swift to ask him where he had got the name for the disease; he replied he had invented it himself to convey the picture of redness and swelling of the hands and feet, but was not altogether satisfied with it as there was no real oedema, pitting being absent.

Dr. Swift also said that when in London he had seen several cases of the disease and had showed them to Drs. Still and Garrod who agreed that they recognized the type of disease with its special characteristics, but were unable to help as to its pathology, nor could they remember any paper or article on the subject.

I have frequently seen these cases in Melbourne for the past thirty years and before my time Dr. William Snowball, of the Children's Hospital, Melbourne, recognized the complaint and spoke of the children with the "raw beef hands and feet." He was of the opinion that the symptoms frequently followed on severe attacks of gastro-enteritis and that the prognosis generally was good. In Sydney the entity of this illness has long been recognized and it is usually spoken of by Dr. Clubbe and others as "the pink disease."

Since hearing Dr. Swift's paper in Adelaide I have been much interested in collecting notes of these cases; I now have notes of forty cases and Dr. F. Hobill Cole has notes of fifty-one cases, most of them having been collected since Dr. Swift's paper became available about 1917. So that the disease when recognized is evidently not an uncommon one.

Ætiology.

With regard to its ætiology I regret that up to the present time I can throw no light on the subject. Blood cultivations have been made by Dr. Reginald Webster, the pathologist at the Children's Hospital, Melbourne, but they have all been sterile. Daily examinations of the faeces have been made for seven days in two cases and no ova or parasites were discovered. Bacteriological examination of the faeces of one patient (D. McK.) yielded all the reactions of the *Bacillus dysenteriae* (Shiga type), but in two other cases lactose fermenting organisms of the colon group only were obtained. The Shiga bacillus having been isolated in one case, the serum of another patient in the hospital at the same time was found to

agglutinate this organism well up to the dilution of one in 200, thereafter less strongly and only feebly in dilution of one in 500. This finding suggested that the peculiar features of the cases were correlated with smouldering bacterial activity in the mesenteric glands. The second child died from broncho-pneumonia and a culture, made from the mesenteric glands, proved to be sterile. It is as well therefore to call the attention of the pathologists at the various children's hospitals in Australia to the work necessary in this disease before the secret of its causation can be cleared up. Children on the breast as young as 3½ months may show the well-known signs of the disease. Children fed on the bottle with cow's milk and with all the patent foods may also be attacked. Children running about well up to three years and six months old may develop the symptoms.

The majority of my patients have been between eight months and eighteen months.

Dr. Snowball's idea that it followed attacks of gastro-enteritis is certainly not borne out by my cases.

Symptoms.

The symptoms of erythroedema are most characteristic when well developed. The child is carried into the surgery with the head bent down generally into its mother's chest or frowning with half closed eyes as though it dreaded the light and refusing to look up; usually it is whining and fretful.

Some patients do not seem able to rest, scratching at their feet or pulling at their hair or ears; frequently making them bleed. If placed on the floor or in their perambulators they will bend their heads forward almost down to their feet. They do not smile and resent any attempt to amuse them. In some cases the red swollen appearance of the hands is an early symptom and, if present, is absolutely pathognomonic of erythroedema.

The pained distressed look of these little patients is most pathetic; they are worn out for want of sleep and in absolute distress from the intolerable irritation of the skin of body, hands and feet. They sometimes become very vicious, scratching and biting at their mother's faces. The mothers also look worn and distressed from long weeks of sleepless nights.

The earliest symptoms in the case of young infants seems to be the continual fretfulness and inability to sleep at night, with disinclination for breast or bottle. This may go on for a week or two when the skin may begin to act freely and a profuse, extremely irritable sweat rash appears over the front and back of the trunk. A little later, it may only be two or three weeks or as late as four or five months after the onset of the fretfulness, the redness of the hands and feet appears. Wasting is an early symptom and with the wasting the muscles become soft and weak. The neck muscles do not appear able to support the head properly and in older children the power of sitting up or walking is lost early in the disease.

Stomatitis is a frequent symptom. Some children

¹ Read before the Section of Diseases of Children of the Australasian Medical Congress, Brisbane, 1920.

having recurring attacks of inflammation of the gums, the teeth in many severe cases become loose and at times fall out, but in other cases the inflammation passes off and leaves them firm again. Photophobia is a very frequent symptom. It may last only a few weeks and then clear up and recur again several times during the attack; one patient I saw suffered with this symptom off and on for five months before it disappeared.

The irritability of the skin leads to scratching and various movements of the body to gain relief. The scratching at the fingers and toes may cause breaches of the skin; marked ulceration may result from infection through the abrasions. In one case I saw bad contraction caused by deep ulceration on the palmar surface of two of the fingers of the left hand. In three cases I have seen deep and extensive ulceration of the skin of the buttocks due to the child working the buttocks backwards and forwards to gain relief from the irritation. In another case a deep ulceration at the side of the nose was caused by scratching.

The redness of the hands and feet accompanied by an icy coldness to touch is the most characteristic symptom of this disease. The redness as a rule is limited below the wrist line although I have notes of one or two cases where it has been noticed above the wrist. It is usually persistent once it appears, but as previously stated it is not always present in the early stages of the disease.

The loss of finger and toe nails is by no means rare; one patient shed his toe nails five or six times in the course of his thirteen months' illness.

With the redness and coldness there is also sweating and the formation of small vesicles about the fingers and toes. It is the scratching at and breaking of these vesicles that frequently start the ulcerations.

The free action of the skin in cases of erythroedema is, with the redness of the hands and feet, one of the most marked features of the complaint. In a well marked case when the hand is placed under the singlet the clamminess of the skin is most noticeable. The sweating is frequently most profuse and this probably determines the irritable miliarial rash that seems to be the chief cause of discomfort in these little patients.

When the rash is marked it is common to find the glands in the axillæ and groins enlarged. It is this pink rash that leads to the name "pink disease."

The temperature, if taken in the rectum, will generally be found to be about 37.8° C., but higher temperatures are not seen except when complications, such as broncho-pneumonia, occur. The insomnia is by far the most trying symptom and it is also the most troublesome symptom to relieve. Night after night these patients toss and squirm and whine with the intolerable pruritus of the whole body and the effect on the parents is such that it is frequently necessary to send the children into a hospital to let the parents have a few nights' rest.

It naturally follows that loss in weight is bound to occur in these cases; in one patient, aged 14 months, there had been a loss of 250 grammes a week for eight weeks.

Looseness of the bowels has not been present in

many of my cases. Constipation has been far more frequent. In other cases the bowels have been regular. The food as a rule seems to be well digested. The urine is scanty owing to the distaste for food, although many of the children drink cold water freely. The loss of moisture by the skin helps to account for the scanty urine. The first evidence of improvement consists of the return of sleep at night and a regular weekly gain in weight. It is very rare for the cases to relapse once the patients begin to improve.

Prognosis.

The prognosis is good in erythroedema, the majority of the patients get quite well.

The one thing, however, that must be impressed upon the parents is that, although the outlook is good, the length of time taken before recovery occurs is variable. I think it is shorter in the young babies than it is in older children. The longest course was in two boys, aged two years and eight months and eighteen months respectively. The former took twelve months to recover and the latter thirteen months before he was well.

Another child of eight months was well in three months.

It can be said that the child's symptoms will almost certainly last from three to four months from the commencement of the illness and may take as long as thirteen months to pass completely away.

Death occurs in erythroedema. There have been five deaths among 91 patients seen by Dr. Cole and myself. In only one of these could it be shown that the death was due to the disease and not to complications. This death occurred in a girl of 17 months from sudden heart failure after I had given a good prognosis. Dr. Swift also had a similar experience in his practice last year.

The other four children died from broncho-pneumonia during the course of their illness. Dr. Reginald Webster, Pathologist at the Children's Hospital, Melbourne, made exhaustive autopsies in all three cases but his findings were largely negative. I have appended his notes of the autopsies at the end of this paper.

Treatment.

Let the child spend the whole twenty-four hours if possible in the open air, preferably in a perambulator or cot. This has in several of my cases contributed largely in promoting rest and increased sleep. No attempt should be made to attract their attention or amuse them; they are sick children and want to be left alone. If a chance occurs to send them from the town into bracing country air, it is wise to do so as they often improve rapidly with the change.

For the sweating and irritability of the skin great relief is afforded by rubbing the whole of the trunk and limbs at least twice a day with methylated spirits and a free dusting with zinc and starch powder. For underwear a loose silk garment is preferable to any of the woollen singlets. For the irritable fingers and toes painting daily with tincture of iodine has in my experience been very satisfactory. It stops the irritation and prevents any secondary infection of skin

abrasions. In rare cases the undiluted tincture has appeared to be too severe; dilution with an equal part of methylated spirit has then proved just as efficacious.

With regard to food, I invariably put them on full raw milk. They take it well as a rule and with one exception the children have digested it well. In the exceptional case I added Benger's food and it was well digested. If the child is on the breast, weaning is not advisable.

With regard to drug treatment, Dr. Snowball always used Savory and Moore's pancreatic emulsion and on more than one occasion it has seemed of some benefit. Dr. Cole is of the opinion that byno-plasma put up by Allen & Hanbury is of distinct value. The lactate of calcium I have tried but have not satisfied myself as to its value. Thyroid seems to be contra-indicated on account of the free action of the skin.

The insomnia is certainly the most puzzling symptom of this complaint to treat. I have pushed *liquor opii sedativus* without the least relief in some cases and with slight relief in others. I have given trional in large doses, also chloral and bromide and Dover's powder, but I am still looking for some suggestions as to how to make some of these children sleep for periods of more than two hours during the height of their symptoms. Sleeping in the open air in the country has certainly succeeded where every form of hypnotic pushed boldly in the city has failed. Where methylated spirit or iodine has failed to alleviate the itching, to save deep scratching cardboard splints to the arms have to be applied.

Summary of Eighty-Eight Cases of Erythroedema Collected by Dr. F. Hobill Cole and Myself Between 1917 and 1920.

- (1) Number of patients; males 52, females 36; total 88.
(2) Age—

Youngest patient, 4 months.
Oldest patient, 3 years and 6 months.
Patients under 9 months, 15.
Patients from 9 to 11 months, 28.
Patients from 12 to 18 months, 29.
Patients over 18 months, 16.

The following are Dr. Reginald Webster's notes of four post-mortem examinations of children dying at the Children's Hospital, Melbourne, from broncho-pneumonia complicating erythroedema:—

T.N., *et.* 1 year 11 months, male.

Post Mortem appearances.—Child very emaciated, with an exfoliative condition of the palms of the hands.

The findings at the autopsy were largely negative.

The thymus depended over the vessels at the base of the heart, but was not unduly large for the age.

Heart.—Small, musculature flabby; there was a small yellowish plaque on the aortic cusp; the ascending and descending aorta were clean.

Mediastinal glands.—Small, discrete, with no indication of pathological change.

Spleen.—normal. Liver: Small, yellowish and of soft consistence. Indication of fatty change.

Gastro-Intestinal Tract.—Mucous membrane of the stomach showed nothing beyond a little viscid mucus.

Small intestine showed nothing of the diaphanous appearance commonly observed in old standing cases of enteritis. The Peyer's patches were carefully inspected, but no pathological lesion was discovered.

Colon.—There were scattered patches of pigmentation indicative of a former inflammatory process, but no evidence of recent lesions. The mesenteric glands were normal in

size and appearance. The kidneys and urinary tract were normal.

Cause of Death.—Broncho-pneumonia with extreme hepatisation of the affected areas.

D. McK., *et.* 2 years, female.

Post Mortem findings.—Body extremely emaciated and cachectic, with remains of a pustular rash on the palm of the hands and also on the scalp.

The organs generally showed little in the way of gross changes.

The heart and lungs showed nothing worthy of note.

The walls of the small intestines were thin and diaphanous; the Peyer's patches showed evidence of former inflammation in the presence of spots of pigment. However, there was no evidence of recent enteritis and the contents of the bowel were of the normal yellow colour and consistence.

The lesions in the colon were more marked. Pigmentation was very marked, with atrophy of many of the solitary glands.

Here again the changes were indicative of an old inflammation. The mesenteric glands were investigated bacteriologically (see note).

The kidneys and urinary tract were normal.

L.F., *et.* 1 year 8 months, male.

Post mortem findings.—Emaciation was extreme.

Lungs.—Showed a definite basal pneumonic process (bilateral).

Heart.—Free from congenital and other defect.

Spleen.—Small, weighing 45 grammes.

Liver.—Pale-yellowish and very friable, suggestive of a considerable degree of fatty change.

The mesenteric glands were small and were very prominent from loss of subperitoneal fat. Otherwise there was nothing suggestive in their appearance.

Stomach.—The mucous membrane was normal.

Small Intestine.—Normal.

The colon showed some pigmentation and atrophy in the solitary glands and follicles, but not a great deal.

The walls of the bowel were not unduly thin and the evidence of gastro-intestinal trouble very slight.

The skin lesions invariably yielded *S. aureus*.

Notes.

Various *ante mortem* and *post mortem* examinations were made as follows:

(1) Blood cultures were taken from all during life; two were sterile after prolonged incubation and the third yielded a skin coccus.

(2) Daily examinations of the faeces were made over a period of one week in the cases of the children T.N. and D. McK.. No ova or parasites were at any time discovered.

(3) Bacteriological examinations of faeces.

In the case of D. McK. there appeared on a MacConkey plate a number of colonies of non-lactose fermenters.

These on separation and subsequent sugar tests yielded all the reactions of *B. dysenteriae* (Shiga type).

In the other two cases lactose fermenting organisms of the colon group only were obtained.

(4) In the case of the child D. McK. a culture from a mesenteric gland secured *post mortem* yielded a Gram-negative bacillus, a non fermenter of lactose and in other sugar reactions conforming to the Shiga type of dysentery.

The child L.F. was at that time in the ward and his serum was examined for specific agglutinin for the strain of *B. dysenteriae* isolated as described above from the mesenteric gland of D. McK.. The serum was found to agglutinate this organism well up to dilutions of one in 200, thereafter less strongly and only feebly in dilutions of 1 in 500.

The findings in the case of D. McK. suggested that the peculiar features of the cases were correlated with smouldering bacterial activity in the mesenteric glands. A culture from these glands in the case of L.F. did not confirm the idea, the glands being sterile.

HOOKWORM IN AUSTRALIA.¹

By W. A. Sawyer, M.D.,

Senior State Director, International Health Board, Rockefeller Foundation; Director, Australian Hookworm Campaign.

Thirty-one years have elapsed since Dr. Hogg,² of Goodna, discovered by a *post mortem* examination that hookworm disease was present in Australia and it was twenty-nine years ago that Doctor Jefferis Turner and Doctor Lockhart Gibson,³ of Brisbane, found hookworm ova in the faeces of living persons. Since then many cases have been reported. Practising physicians have grown familiar with the disease and it has become the object of attack by public health agencies. It is fitting that the Public Health Section of the Australasian Medical Congress, held in the city where the earliest Australian investigations into hookworm disease were conducted, should consider what has so far been discovered in Australia with regard to this disease.

The total volume of information has been considerably increased in recent years by the systematic examination of the faeces of practically all the inhabitants of certain large areas, in connexion with campaigns against hookworm disease. While the large organized attack on hookworm disease began in 1918, when Dr. Waite commenced work under an agreement between the State of Queensland and the International Health Board, the method in general had been previously advocated by Salter,⁴ Turner,⁵ Breinl⁶ and others. The continuation of control measures on an increased scale under the present Hookworm Campaign, carried on jointly by the Commonwealth of Australia, the International Health Board, the State of Queensland and the other States and the Territories in which work is being done, has already added considerably to our knowledge of hookworm infection in Australia, particularly with regard to prevalence and geographic distribution.

It appears that hookworm infection in Australia is not very wide-spread, being confined principally to irregular areas with fairly sharp boundaries. The principal factor determining the shape and position of these areas in the tropics and sub-tropics of Australia seems to be the amount of rainfall. Moderate

variations in latitude and temperature are not the chief determining factors in the distribution, as is shown by the high infection at Ingham and the complete absence of hookworm disease just over the range in the Kangaroo Hills. Likewise, there is practically no infection at Thursday Island and very little in Bowen, while about 10% of the people are infected in an area only sixty miles north of Brisbane.

The influence of the composition of the soil has not yet been thoroughly studied, but it appears to be a minor factor compared to rainfall. Likewise, variations in heretofore existing methods of disposal of night soil have not had as much influence as the fluctuation in the amounts of annual rainfall.

In the tropics and sub-tropics, where there is a high rainfall, say over 127 cm. (50 inches), the control measures become difficult. The prevention of soil pollution has to be practically complete and enforced over a period of years before hookworm disease ceases to have an obvious influence on the health of the people. In some Australian tropical communities of low annual rainfall, even up to 76 cm. (30 inches), there is gross carelessness in the disposal of faeces and but little or no hookworm disease.

In Queensland, where most of the investigations have been made—over 56,000 persons have already been examined—there is an area of high prevalence of hookworm infection throughout a region of high rainfall, extending from Cooktown to Ingham, between the coastal ranges and the sea. From Townsville to Bowen the rainfall and the infection rate are low. Between Proserpine and Mackay the annual rainfall and the amount of infection are again high. Between Mackay and Nambour little systematic work has been done. Around Nambour and Landsborough we find another area of high rainfall and considerable hookworm infection. There is a similar area with abundant rain on both sides of the border between Queensland and New South Wales and it will be of interest to determine whether this region is one of the areas of endemic hookworm disease. We expect to find most of the interior of Queensland entirely free.

In addition to the strips and patches of infection along the Queensland coast, it is expected, on the basis of scattered reports, that infection will be found in several places on the Gulf of Carpentaria. In Northern Territory an investigation is to begin at once at Darwin and vicinity. A survey of South Australia is nearing completion and the results to date seem to indicate that the State is entirely free from endemic hookworm disease.

In Papua the natives on the plantations are highly infected, while in the villages the infection is variable but usually high. Towns built on piles over the sea are almost entirely free. To prevent the plantations from acting as disseminators of hookworm infection and to conserve the health of the labourers, the managers of the plantations are establishing deep pit latrines of the Oriental type and are co-operating in the periodic treatment of the natives at intervals of six months. The first round of treatments is given by the staff of the Hookworm Campaign at the time of their investigation.

The experience in Europe and America with hook-

¹ Read before the Section of Public Health of the Australasian Medical Congress, Brisbane, 1920. The studies and observations on which this paper is based, were conducted with the support and under the auspices of the Commonwealth of Australia, the International Health Board of the Rockefeller Foundation, the State of Queensland and the other States and Territories participating in the Hookworm Campaign.

² Hogg, J. B.—A Case of Death from Anemia due to *Ankylostomum Duodenale*, *Australasian Medical Gazette*, Vol. VIII, pp. 133-134, February, 1889.

³ Gibson, J. L., and Turner, A. J.—Notes on the Occurrence of *Ankylostomum Duodenale* in Queensland, *Transactions Intercolonial Medical Congress*, Third Session, pp. 154-157, Sydney, 1892.

⁴ Salter, A. S.—*Ankylostomiasis Amongst Queensland Children*, *Australasian Medical Gazette*, Vol. 28, pp. 352-356, July 20, 1909.

⁵ Turner, A. J.—The Prevention of Parasitic Anemia, *Australasian Medical Gazette*, Vol. 28, pp. 350-352, July 20, 1909.

⁶ Breinl, A.—*Australasian Medical Congress*, Ninth Session, Vol. I, pp. 536-541.

worm disease in deep mines caused grave apprehension lest the deeper and warmer mines of southern Australia had become infected. The mines so far examined have been free from infection and it is hoped soon to have figures for representative mines in all the States. The New South Wales Technical Commission of Inquiry into Miners' Diseases did not find hookworm infection at Broken Hill and the investigation by the Hookworm Campaign of the mines at Bendigo and the principal mines in South Australia have given uniformly negative results. This is very fortunate, for the control of hookworm disease in infected mines is a difficult and prolonged procedure. We have as yet little information about the mines located near heavily infected surface areas.

It is the aim of the Hookworm Campaign to map the entire continent of Australia and its possessions with regard to hookworm disease and to carry on intensive control operations wherever the disease is found. In the investigation of areas in which conditions of temperature and humidity are not favourable, the surveys are made rapidly and involve only representative groups of people, including particularly children, miners, hospital patients and workers in irrigation districts.

Where hookworm disease is known to be endemic, the region is divided into districts, in each of which work can be carried on from one centre. In these districts all the people are listed and specimens of their faeces are obtained and examined for hookworm ova. If the ova are present, the patients are treated in their homes by the medical officer or assistants under his direction. The procedure used in most of the field units is to advise the patient to eat a light supper the day before the treatment and to take no breakfast until the doctor comes in the morning. The routine treatment for an adult consists of 1.5 c.cm. of oil of chenopodium in capsules taken in the presence of the medical officer or inspector and a generous dose of magnesium sulphate an hour later. The dosage of chenopodium for children is in proportion to age. Most of the medical officers give the oil of chenopodium in a single dose, but some still give two half doses an hour apart. The preliminary purge is omitted, with the result that the treatment is much more popular, interferes less with work and is not noticeably less efficient. By giving the treatment to adults on Sundays loss of time from work can be almost entirely avoided. In a week a second similar treatment is given and two weeks later the faeces are examined to determine whether a cure has been effected. An earlier examination would be inconclusive, as ovulation is inhibited for a time by chenopodium.

Over half of the persons treated are found to be cured at the first re-examination. Treatment is repeated as often as necessary. Oil of chenopodium is a powerful drug and patients will complain occasionally of tingling of the hands or of other toxic symptoms due to absorption of the oil. Serious symptoms have not been reported by any of the field men in Australia and this is to be ascribed to the conservative dosage of oil of chenopodium, the generous dose of Epsom salts and the care not to treat patients at home who are seriously ill. When practically all

the infected persons in a district have been treated, the privies brought up to the standards of the campaign and the community has been impressed with the necessity of preventing soil pollution, the district is classified as a "completed" area. Naturally, a certain amount of follow-up work must be done in the completed areas to cure reinfections and more particularly to prevent a slump in standards of sanitation. The function of the Hookworm Campaign is to make a complete investigation of hookworm disease and bring it under control. It is the function of the local health authorities to keep it under control.

The attack on hookworm disease in Australia depends for success on the vigorous prosecution of the following three lines of activity:

(i.) Establishing sewerage systems and sanitary privies and requiring all people to use them exclusively.

This measure, alone, if it could be enforced with absolute completeness, would solve the problem in the course of time and hookworm disease would become extinct on the death of all hookworms now in the intestines of human beings. It is believed that hookworms may live eight or ten years.

(ii.) The treatment of persons harbouring hookworms until they have been completely freed from these parasites and are no longer able to infect the soil with hookworm ova.

If this could be completely accomplished for all persons who are harbouring hookworms, or who acquire new infections before the existing larvae in the soil have died out, this method alone would ultimately stamp out the disease. It is probable that hookworm larvae survive in the soil ten months or longer.

(iii.) Inducing the people through education to appreciate the damage from hookworm disease and to wage effective and relentless warfare on this and other preventable diseases through permanent governmental health organizations.

This method would cause steady decrease in the prevalence of hookworm disease and would insure the permanence of the results obtained.

No one, or two, of the above methods will give the results expected from the Hookworm Campaign. The first two methods would give brilliant immediate results, but would not prevent a gradual return to former conditions. The third method would give permanence of result, but would be slow in development. The three methods can be pursued at the same time with complete harmony. Each increases the results obtained from the others. The first and second methods furnish the demonstration which makes the third possible. The third brings the public support necessary to the first and second. The combination gives the maximum and most permanent results.

The agencies co-operating in the Hookworm Campaign are represented on the committees supervising the work. The Central or Commonwealth Committee consists of the Secretary of the Department of Home and Territories, the Director of Quarantine and the Dean of the Faculty of Medicine at Melbourne University. In each of the States participating there is an executive committee which is composed of the executive head of the State health organization, a representative of the Commonwealth Quar-

antine Service and the Director of the Hookworm Campaign, representing the Rockefeller Foundation. In Queensland the Director of the Australian Institute of Tropical Medicine is also a member. Through this organization and a series of monthly and final reports, it is possible to keep all the participating agencies well informed about the work for which their money is being spent.

The staff of the Hookworm Campaign is organized into five units, each under a medical officer in charge. These units can be moved from area to area without dislocating the organization. One of the field units is engaged primarily in investigations and the others are occupied principally with intensive control operations.

Incidental to the surveys and control operations, it is possible for the medical officers to make valuable scientific observations and to co-operate with the Australian Institute of Tropical Medicine and other scientific institutions, by procuring specimens for study and in other ways.

Of considerable interest are the observations of intestinal parasites discovered incidentally in the search for hookworm ova. The results of a long series of observations in North Queensland are discussed by Dr. S. M. Lambert in a paper prepared for this meeting.

The classification of hookworms into the two species known in Australia has not as yet been carried very far. In a number of worm counts recently made the following hookworms were obtained:

Source.	Species.	Male.	Female.	Total.
Fifteen Papuan Natives	<i>Anchylostoma duodenale</i>	3	18	21
	<i>Necator americanus</i>	15	49	64
Twenty-Eight Queensland Aborigines.. ..	<i>Anchylostoma duodenale</i>	35	22	57
	<i>Necator americanus</i>	67	125	192
Two Queensland Whites (Ingham)	<i>Anchylostoma duodenale</i>	3	6	9
	<i>Necator americanus</i>	42	53	95
Total for Forty-Five Persons.. .. .	<i>Anchylostoma duodenale</i>	41	46	87
	<i>Necator americanus</i>	124	227	351
Total Hookworms		165	273	438

THE TEACHING OF PREVENTIVE MEDICINE TO MEDICAL STUDENTS.¹

By Frank S. Hone, M.B., B.S. (Adelaide),
Lecturer on Preventive Medicine, Adelaide University.

"The first duty of medicine is not to cure disease, but to prevent it." Medical men in varying numbers and with varying reservations have held some such belief from time immemorial. As the causes of disease became better understood, the number of such medical men increased. But in recent years the increase in weight of such medical opinion has been nothing like the increasing strength of the general public feeling on this question. For many medical men are debarred from holding this opinion because of their belief in the impossibility of ever carrying it out. Such men to-day would agree to the

The two common species of hookworm are commonly found in the same patient. With the hookworms passed after treatment, there are often specimens of female thread worm (*Oxyuris vermicularis*) and, in Papua, specimens of ascaris.

As the work of hookworm control progresses it becomes more apparent that wholesale treatment without the prevention of soil pollution is futile as far as permanent control is concerned. It is common to find a heavily infected patient who states that he was sent to a hospital in a distant city a few years ago and cured. This expensive method of handling hookworm infection gave temporary relief, usually followed in children by early re-infection. The doctors who treated the children, were too far away from the home to do effective work in correcting the conditions responsible for the disease or in treating the other members of the family who showed fewer symptoms. The logical procedure is to prevent soil pollution first and treat the sick afterwards. The results will be more lasting.

In preventing soil pollution, it is not enough to build good privies, fly-tight and rodent proof at every home. Of equal importance is the campaign of education which brings about the exclusive use of the facilities provided and encourages the wearing of shoes where exposure to hookworm infection is possible.

Hookworm disease in Australia is serious, but controllable. Its control will depend principally on the prevention of soil pollution.

truth of this principle in war, because they have recently been applying such principles under war conditions, but they would probably still say it was an impossible dream under civil conditions. The public do not believe that this should be any bar to a better organized attempt at prevention. An increasing number of medical men share this view. Belief in this opinion has spread rapidly in England of recent years, as evidenced by the formation of a Ministry of Health and its activities since the war ended.

If this is the growing trend of opinion, it behoves us, then, who are teaching future practitioners, to be teaching the ideals and methods of preventive medicine. But if we are asked to what extent we are doing this in Australia, there is only one answer possible, viz., that up to the present year no medical school in Australia has been making the slightest conscious or organized attempt to teach preventive

¹ Read before the Section of Public Health of the Australasian Medical Congress, Brisbane, 1920.

medicine, or even seems to be aware that preventive medicine needs teaching to our students.

The very fact that some will at once contradict this and point to lecture courses in our Universities, really proves the truth of the assertion. For such lecture courses are always in public health and hygiene. But what is commonly called public health is only one department of the subject of preventive medicine and the objector who would limit the teaching of preventive medicine to the public health course, by that very fact continues the tradition that the main aim of medicine is to cure and prevention is only a side line. But granting for a moment the truth of such an objection, let us examine the actual teaching of this subject as it is set down in our university calendars.

The Universities of Sydney, Melbourne and Adelaide each include public health in the medical curriculum.

In Sydney thirty lectures are given in the fifth year of the course: the schedule is as follows:—

Public Health.—Meteorology: Temperature, winds, humidity, rainfall, atmospheric pressure, climate. Air: Composition, impurities, ventilation, amount required, natural and artificial ventilation, examination of air. Soil: Ground water, ground air, organic matter in soil, classification of soils. Water: Quantity and supply, quality, impurities, purification, examination of water supplies. Food: Classification of foods, dietaries, preservation of foods, unsound food, diseases caused by food. Sanitary engineering: Dwellings, sanitary defects, disposal of refuse, wet and dry methods, sewers, sewage disposal. Disease: Infectious diseases, history of epidemics, means of prophylaxis, occupational diseases. Vital statistics. The law of public health: Notification, preventive measures, nuisances, insanitary habitations, protection of food supplies.

In Melbourne until a few years ago lectures on hygiene (personal, public and legal), were included in the course of therapeutics, dietetics and hygiene. Some three years ago public health was made a separate subject from therapeutics. Lectures on the subject are given twice a week in the third term of the third year and once a week in the first term of the fourth year. Students are also expected to attend at the fever hospital. The schedule of lectures is as follows:—

Public Health.—Air: Composition, impurities, ventilation, amount required, natural and artificial ventilation, examination of air. Soil: Ground air, ground water, organic matter in soil, classification of soils. Water: Quantity and supply, quality, impurities, purification, examination of water supplies. Food: Classification of foods, preservation of foods, unsound food, diseases caused by food. Sanitary engineering: Dwellings, sanitary defects, disposal of refuse, wet and dry methods, sewers, sewage disposal. Meteorology: Temperature, winds, humidity, rainfall, atmospheric pressure, climate. Disease: Infectious disease, history of epidemics—means of prevention, occupational diseases. Vital statistics. The law of public health: Notification, preventive measures, nuisances, insanitary habitations, protection of food supplies.

In Adelaide no lectures have been given until the present year, but the following schedule was put down for reading:—

Elements of Hygiene.—Air: Composition, impurities and contaminations. Ventilation (natural and artificial): Warming. Water: Sources, composition, impurities and contaminations, amount, collection, storage and distribution, purification, interpretation of results of microscopical, chemical and bacteriological examination.

Soil: Temperature, moisture, ground air, composition, contaminations and disease, nitrification. Buildings: Materials, construction, situation and orientation, accessories and surroundings, inspection of houses, hospitals, schools. Removal of Refuse: Dry and water carriage systems, disposal. Disposal of the Dead: Burial, cremation. Foods: Classification, dietaries, diet and morbid conditions, adulteration of food, foods and disease. Meteorology: Climatic phenomena, weather maps. Animal parasites. Infective Diseases: Infection, disinfection, prevention, military and naval hygiene. Vital statistics. Sanitary Law: The health, vaccination, food and drugs act and regulations in force in South Australia.

The text-book set is Whitelegge & Newman's "Hygiene & Public Health." This, or Parkes & Kenwood's "Hygiene & Public Health," is the text-book in Melbourne. No text-book is mentioned in University Calendar of Sydney, but Dr. Armstrong informed me he used Hope's "Public Health."

An examination is held in each University; in Sydney during the fifth year, in Adelaide at the final examination and in Melbourne in the examination for the third division.

Melbourne and Sydney both grant also a Diploma of Public Health to graduates of at least one year's standing who have gone through a more advanced course of study and practical demonstration.

It is thus evident that subjects relating to public health have been included in the curriculum of Australian medical students in some form or another for the past twenty or thirty years. The question arises: has the teaching in this branch of medicine reflected the growing knowledge of the subject and revealed to students that wider range of vision and that new outlook which later developments in preventive medicine have given us?

Suspicion at once arises that this is not the case from the fact that each university schedule has up to the present year continued to demand as a separate item that a student in his fourth or fifth year shall have acquired proficiency in vaccination under the direction of a public vaccinator. This has only been struck out of the Adelaide University schedule this year and still appears in Melbourne and Sydney schedules, as if vaccination against small-pox were the only prophylactic inoculation of importance. This may have been true a generation ago when these schedules were originally drawn up. But to take one instance only, during the past five years I suppose nearly as many Australians have been vaccinated against typhoid fever as against small-pox.

It may be rejoined that vaccination is still the only prophylactic measure compulsory in the different States. That does not alter the fact that to put this alone as the only practical measure in preventive medicine of which the student must have a first hand knowledge of technique, and further to separate it from the rest of the public health schedule, is to present an ideal that is woefully out of date and gives a false perspective to the student, for it over emphasizes immunization against small-pox and neglects any form of immunization as a means of prevention of other diseases.

Looking further into the schedules we see that each one, as printed, lays emphasis on air, soil, water, food sanitary engineering, infectious diseases, in that order. This was the view point of a generation ago. It is decidedly not the view point of to-day. Dr. W.

G. Armstrong, the lecturer in Public Health in Sydney University, told me at the beginning of this year, that he was struck with the increased emphasis laid on infectious diseases in his lectures of the last few years, as compared with a few years back. That is probably true of all teachers on the subject. None the less the student tends to get his view point and his ideals from a perusal of the syllabus, and the point of view gained from these schedules puts sanitation first, infectious diseases second and the rest nowhere.

Now if our teaching is to be of any practical use it must be prophetic in its practicability: it must on the one hand avoid dull routine, it must, on the other, give ideals that can be carried into practical effect. It has been well said with regard to preventive medicine that there seems a natural sequence of events, *viz.*, for emphasis to be laid in the first stage of advance on sanitation, in the next stage on communicable diseases and in the third stage on non-infectious diseases. And the view generally accepted now-a-days is that we have reaped the main harvest from attention to the first and that we have just at present neither the agreement amongst ourselves, nor the administrative organization, nor the support of the public necessary to secure adequate results from the last department; but that we have the knowledge, the equipment and co-operation necessary to secure very rapid and tangible reductions in the incidence of communicable diseases and that with the lessons of the recent war fresh in the minds of the public, this is the field we should work for all we are worth.

Consequently if our teaching to students is to inspire them with ideals that are not merely visionary, but capable of bearing fruit, it should at the present juncture deal first and foremost with the control of infectious diseases.

But few of us, without reflection, realize the amazing change in outlook that has taken place within the last ten years in facing even the problems of these diseases. Transcending all other changes is the transfer of emphasis from the environment to the individual. A generation ago the centre of thought was sanitation: to-day it is epidemiology. The chief vectors or carriers of communicable disease then thought of were inanimate vectors—air, soil, water: to-day they are animate vectors—human carriers, flies, mosquitoes and other insects. The diseases that were then thought conveyed by direct contact, like plague, yellow fever, typhus, bilharziosis, now prove to be transmitted by insects: diseases that were ascribed to drains or to dust, water or air, like diphtheria, typhoid, influenza, now prove in whole or great part, to be conveyed by infective sufferers or carriers. Further if we agree that the main public routes of communication are water, food, flies and milk, we are also agreed that there are many more private routes which we sum up under the term "personal contact." Water and food carry practically only the intestinal infectious diseases, flies and food also carry these mainly, but also some others. But if we begin with any of these routes we must work through one after the other to "contact," before we are finished, whereas if we start with "contact" and control of contact we find that the method

which eliminates contact infection, eliminates all other forms also. This method when robbed of all accretions, is summed up as the control of infective persons.

But the continued emphasis in our schedules of study of the importance of environment, coupled with the fact that the text-books recommended present the subject in exactly the same perspective (unlike more modern books like Rosenau's "Preventive Medicine" and Gardner's "Practical Sanitation") have united to keep our medical students and therefore our younger practitioners blind to the new outlook.

They have done more than that; they have, I think, actually withdrawn the ordinary practitioner from personal participation in the battle against the occurrence of disease.

I may be wrong, but I have of late years come to the conclusion that the average practitioner of to-day is much less actively impressed with his personal responsibility in the prevention of disease than he was in the latter part of the last century. Graduates of that time lived their student life in the full flush of enthusiasm brought about by the early victories of last century against various epidemics. The victory of vaccination in the early part of the century, the checking of cholera epidemics in the middle of the century, the stamping out of typhus, seemingly by sanitation, the lessening of typhoid by water-carried sewage, through purification of water supplies, the early discoveries of bacteriology, the control of surgical sepsis and all the diseases pertaining thereto, the discovery of diphtheria antitoxin, brought home widely to students of that age the untold possibilities of prevention. The new wonders of surgical asepsis made each one of them realize his responsibility and unconsciously their whole outlook on infectious processes was tinged with this sense of personal relationship to preventive measures. But that wave has spent itself and,

"Now I only hear

Its melancholy, long, withdrawing roar."

Surgical asepsis has become a commonplace; the newly qualified practitioner knows no other state; he contrasts the rarity and rapid control of surgical infections with the frequency and the want of control of medical infections and through want of experience and lack of imagination, he cannot realize that but one short generation ago, we were even more powerless with the one than with the other.

The recognition of the necessity for public health administration which led to the appointment of medical officers of health at the close of the last century, has still further dissociated the general practitioner from responsibility. The creation of a public health service has resulted in a "leaving it to them" policy on the part of the general practitioner, as soon as he has notified "a case." The fear of overlapping, of the practitioner encroaching on the public health official's domain and *vice versa* has helped to bring this about. Further, those improvements in environment which medical men of fifty years ago were fighting for, have become the natural duty of other officials. The provision of sufficient light and air in houses is the subject of corporation by-laws;

the drains are attended to by a certified plumber; the water supply is in the hands of a water-works department; the architect and the sanitary engineer learn all these things in his apprenticeship as a matter of course. How do they touch the general practitioner? Yet somehow if the new wave of progress in public health is to come, we have got to recapture the interest and the enthusiasm and the co-operation of the general practitioner. And we can only do it by the ideal we set before the student of to-day who is the practitioner of to-morrow.

We need then frankly to recognize that much of what our schedules of instruction have been emphasizing is of no great importance or interest to the average practitioner if he is to co-operate in the prevention of disease. They are rightly studied much more fully than used to be the case by the man who intends to be an expert in preventive medicine and to become a public health administrator. The more we can encourage men with such ambitions to take out these special courses after graduation, as a preliminary to specialization, the better.

Such a man acquires his D.P.H. as the surgeon does his F.R.C.S. or the physician his M.D. on some special subject. But none the less the ordinary general practice of all three departments should be done by the general practitioner and the teaching given him as a student should fit him for these different departments.

It is wise then to recognize the two different standards of study. The higher course is taken for granted in this paper. What it is chiefly concerned with is the teaching to the man who will be the general practitioner of to-morrow.

What, then, are the ideals we should be endeavouring to set before the medical student of to-day?

First I should say, we should draw the natural lesson from the history of the struggle for asepsis in hospitals, to picture to ourselves and our students the ideal of an aseptic State or Commonwealth.

Compare the average hospital of 50 years ago with the average State of to-day. To-day we shut out various virulent infections by closing our State borders with sea quarantine, just as a hospital used to shut out the most acute infections by closing its doors. But just as in these days they had pus infections endemic in their hospitals, so we have medical infections endemic within the borders of our States. They started by blaming the air and directing all their efforts to that; we have passed through that stage; the theory of air-borne infection is just disappearing from our textbooks and the inhalation treatment of influenza has passed into limbo with the carbolic spray of the operating room. As the next step they sterilized their water and we have purified our water supplies; finally they came to see that it was the surgeon's and the dresser's and the nurse's hands, as well as these other things, that had to be seen to; in other words they came from environment to contact, just as we are doing now in medical infections. Can we not set up the ideal that if we follow each hidden source of infection and guard against it, just as faithfully as each fresh source of infection was revealed and followed up in surgery, the same results will ultimately follow with the State?

Can we impress on the student that his responsibility for sepsis in maternity, is just as great as in surgical wounds; that his responsibility for loss of function in pelvic organs subsequent to childbirth, is just as great as in abdominal parietes after laparotomy; that a fresh case of diphtheria or scarlet fever occurring in a family is just as much his fault as a fresh case of sepsis occurring in his ward; that just as surgical asepsis in joints prevented cripples, so the prevention of rheumatic infection will prevent crippled hearts; that we are with medical infections in a state just where the surgeon of the early 'nineties was with surgical infections? We have a measure of control of certain of the grossest infections, but many of our generation still believe in laudable infections, as the older surgeons of that generation believed in laudable pus.

How can we by our teaching foster this ideal? First I think by altering the name of the course.

Let us for the time drop the public health altogether and substitute the term "preventive medicine" or at any rate put it in the forefront. There is a good deal more in this than may appear at first sight.

For one thing it gives us the opportunity of emphasizing that in this course we are summing up in practical form an ideal that ought to be running through all our hospital work and training. We can then establish in the mind of the student principles of preventive medicine, just as elsewhere he is instructed in principles of curative medicine. Next, it enables us to kill the idea that he is apt to get of this subject being a sort of fireside philosophy and to fix in his mind the idea of a battle and further of a battle which is already joined and in which he has got to take his share. In other words the term helps us to be forming in the student a habit of mind and of action, rather than filling him with certain facts. The change of name will help towards this much more than we think.

To this must be added three other subsidiary changes:—

(a) The lectures must come much earlier in the course than they do at present. I know that in saying this I am at variance with English teachers, but it will be noticed that their remarks apply to the old "public health" course, rather than to the course of preventive medicine which I would substitute.

The student begins to be drilled in aseptic surgical ideals when he enters the surgical ward. Why should not the same be true of medical infection? Why should the student wait till the end of his course before these ideas of prevention of diseases are instilled into him? This one fact, more than any other, at present serves to differentiate in his mind the importance attached to the prevention of surgical infection from the lack of attention paid to medical infection. The one is a preliminary of all his dealings with surgical conditions. The other is an after thought.

The proper place for his preventive medicine lectures is right at his entrance to the hospital. The lecturer can then correlate the prevention of medical infection with that of surgical infection. The student is then learning his bacteriology and his immunology,

which give him the natural history of diseases. As for instance he has learnt the life history of the mosquito and protozoan in his biology or zoology and the structure and functions of human tissue and body fluids in anatomy, physiology and bio-chemistry, so now while he is learning in his course in pathology the pathological changes set up by the invading organism and its toxins and the immunity acquired by the individual, he can at the same time be learning the way to prevent mosquitoes multiplying and to control the movements of infective individuals.

So with the carrier problem and so with other infective individuals.

(b) The attention should be concentrated chiefly on the infectious diseases. I find that this year I have devoted well over half the course to this aspect and this could be well extended.

(c) The subject should be stated in the form of the actual problem confronting us in attempting to control each disease, the factors assisting us, the factors at present retarding our solution and the measures to be adopted.

In lecturing this year I have stated them as the problems of prevention in the exanthemata, in the septic group, in the meningitis group, in other diseases spread by human carriers, in the water-borne group, in the insect-borne group, in maternal and infantile mortality, in school and occupational diseases, in administration and so on. This enables us to put the different position with regard to different infections and at the same time cultivates in the student the mental attitude of facing a problem that must be solved.

There remains the question of practical work. Melbourne University insists on certain attendances at the infectious diseases hospital, Adelaide has just added this to its course and includes "demonstrations" with lectures. I have not ascertained the practice in Sydney. In the discussions in England practical work is divided into attendance at fever hospitals, demonstrations and laboratory work. On the latter point it must be remembered that what is required is provided in the bacteriology and immunology course. Also, bearing in mind what I have said about ideals, it seems to me we must be careful not to limit our ideas of practical work to particular hours in this particular course. The ante-natal clinic and baby clinics are practical work in preventing infantile and maternal mortality; the maternity clinic, rightly viewed, should be regarded as practical work in preventing many gynaecological diseases; the surgical wards show numerous practical applications of the prevention of surgical infections. We should seek to extend the thought of the preventive ideal in all practical classes, rather than to limit it to certain hours or places. Demonstrations in disinfection, in sewage disposal schemes, and so on, might well take the place of lectures. But advanced examination of water, food, milk, etc., more than has been learnt in the chemistry course, belongs rather to the D.P.H. course. What I think would be better than all these, would be for the attendance of the student at the fever hospitals to involve taking up of certain cases and attempting to trace the actual source of infection by questioning

of the patient, visitation of home, following up of any possible sources of infection and endeavouring to locate the origin of this particular case. Such experience would be invaluable for after life and again would be cultivating a habit of mind. I am hoping to arrange some such work, although I recognize it will be only experimental.

The same remark, of course, applies to all that has been put forward. It is not meant to be dogmatic, but is said in order to provoke the discussion that ought certainly to take place on this subject.

Reviews.

THE TEACHING OF MEDICINE.

The Eleventh Edition of the "Elements of Medicine,"¹ by Dr. Carter, revised by Dr. Alexander G. Gibson, brings this work more or less up to date. The plan of the book remains the same as before. Certain portions have been eliminated and additions made where they seemed necessary. The information contained is brief and decidedly incomplete. Spores of micro-organisms are not seed-like, but a peculiar metamorphosis to protect them in uncongenial environment. On page 57 it is stated that perforation of the bowel in typhoid fever occurs as the result of acute peritonitis set up by the escape of the intestinal contents into the abdominal cavity. This mistake is evidently due to an oversight in the revision. We fail to see the usefulness of such elementary treatises, which are valueless for reference and give the student too superficial a grasp of the important subject of medicine. It is, however, not to be expected that the various diseases could be satisfactorily described within the limited space of 700 pages, yet the fact that the book has reached the eleventh edition speaks for its employment by many.

Notes on Books.

Every true Australian will agree with Mrs. Hayward, the authoress of "Tales and Tales of Tails and No Tails,"² that Australia is a wonderland. It is a wonderland full of beautiful, quaint and interesting things; with surprises for every student and observer, young, middle-aged and old; with fascinations that know no equal. The variety of flowers, plants, birds, animals and insects peculiar to this vast continent is endless. Equally endless is the joy awaiting those who revel in the watching of these strange prizes. Mrs. Hayward wishes to tell each small Australian child of the curious qualities and characteristic habits of the commoner animals and birds. She endeavours to whet the young appetite, so that the heritage may be enjoyed to the full as childhood proceeds and eventually makes room for adolescence and the more prosaic age of being grown up. She has borrowed the clever pen of her daughter, Mrs. Herbert Kay, whose delightful sketches enhance the charm of the baby stories, told in "Jingle rhymes." Each chapter contains some hidden pearl, easily discovered by an eager infant who loves the birds, the wombats, the possums and the eerie ant-eaters. It is a delightful book for mothers and fathers, aunts and uncles to read to the future citizens of our wonderland.

We learn that Sir Archibald Garrod, who followed the late William Osler as Regius Professor of Medicine at Oxford, has relinquished the Directorship of the Medical Professorial Unit at St. Bartholomew's Hospital. Dr. Francis R. Fraser has been appointed in his stead.

¹ Elements of Practical Medicine, by Alfred H. Carter, M.D., M.Sc.; Revised by Alexander G. Gibson, M.A., D.M., F.R.C.P.; Eleventh Edition, 1920. London: H. K. Lewis & Company, Limited; Crown 8vo., pp. 695. Price, 16s. net.

² Tales and Tales of Tails and No Tails, by F. Hayward (Firenze), illustrated by Marjorie D. Kay; 1920. Adelaide: Pritschard Brothers, Post 8vo., pp. 86.

The Medical Journal of Australia.

SATURDAY, FEBRUARY 19, 1921.

Erythroedema or the "Pink Disease."

In February, 1914, Dr. H. Swift, of Adelaide, read a paper before the Section of Diseases of Children of the Australasian Medical Congress, Auckland, in which he described under the term "erythroedema" a symptom complex characterized by extreme fretfulness, neuro-muscular disturbance, sleeplessness and a red rash involving the hands and feet and at times other parts of the body. The disease had been noted for many years by Dr. Swift, but had not previously been described. No other observer had attached importance to the complex of symptoms and signs, although several seem to have had experience of the condition and to have recognized the typical appearance of the little patients when their attention was drawn to it. Several physicians attached to hospitals for children both in Australia and in England were attracted by Dr. Swift's communication and discovered that the condition was by no means uncommon. Later Dr. C. P. B. Clubbe, of Sydney, exhibited some infants affected with the disease. He suggested that the term the "pink disease" might be regarded as suitable, but did not hesitate in identifying it with erythroedema of Dr. Swift. In July, 1917, Dr. Swift again dealt with this subject and introduced a patient to a meeting of the South Australian Branch of the British Medical Association. A short account was published in these columns. Dr. W. F. Litchfield was also interested in the condition and sought to impart his enthusiasm to his colleagues in the New South Wales Branch of the British Medical Association by demonstrating the skin and nervous changes at meetings of the Branch. The last reference published in this *Journal* will be found in the issue of April 24, 1920. Dr. A. Jeffreys Wood read a paper before the Australasian Medical Congress, Brisbane, 1920, on the subject. This admirable clinical description of erythroedema or the "pink disease" is published in full in this issue, while a summary appeared in the Congress Number on September 18, 1920. It thus ap-

pears that six months before this *Journal* came into existence, Dr. Swift had published the first account of the disease and that on various occasions since, brief reference to it has been made in our columns. It would, however, appear that the complex has been re-discovered in America. Last year Watson gave an account in the *Journal of the American Medical Association* of a few cases observed since the year 1915. This account was followed by another in the *Archives of Pediatrics* and in November an interesting article by Byfield appeared in the *American Journal of Diseases of Children*. It is unfortunately not unusual for American authors to ignore British work. Dr. Byfield and his countrymen who have written on this subject, ignore Dr. Swift's description. It is necessary to establish the priority of Dr. Swift in regard to the recognition that erythroedema is a distinct clinical affection. Watson's earliest case was observed in 1915, that is over a year after Dr. Swift's communication. Dr. Byfield has records of seventeen cases of recent date. There is no doubt concerning the identity of erythroedema and the affection described by Watson and Byfield. The nomenclature, however, is singularly unfortunate. The former endeavours to identify it with acrodynia or epidemic erythema, a condition first described in 1820. The resemblance appears to be entirely superficial and slight. The latter writes of a "polyneuritis syndrome resembling pellagra-acrodynia (?) seen in very young children." The similarity to pellagra is imaginary. He makes an attempt to define it as a post-influenzal radiculitis or sensory polyneuritis. While the aetiology is still quite unknown, it is certain that the majority of cases occur in children who have not been previously attacked by a febrile disturbance like influenza. The morbid anatomy and the pathology are too indefinite to justify a hazard concerning the essential changes either in the nervous system or elsewhere. Few infants die of the condition. Until a death occurs from the disease and not from a complication, such as tuberculosis or bronchopneumonia, care should be exercised not to build up the pathology of the disease on insufficient data. Erythroedema may be a deficiency disease. Many of the signs and some points in the general course of the disease appear to favour this hypothesis. Again it may be an infection. Evidence is wanting of the

presence of an infective agent, just as it is wanting in regard to the suggestion that it is a deficiency disease. We concur with Dr. Jeffreys Wood that work has to be conducted before the aetiology can be discovered. In the meantime Australian practitioners should be prepared to recognize the disease when it occurs in young children and should lend their assistance in the endeavour to solve the problem.

EFFECTS OF ALCOHOL ON NORMAL AND FATIGUED STATES.

The action of alcohol on the central nervous system has been the subject of a prolonged controversy in which the sociologist has been interested equally with the pharmacologist. On the one hand, there were those who agreed with Binz that alcohol first stimulates the nerve cells of the central nervous system and later depresses them; and on the other, there were the supporters of Schmiedeberg, who held that alcohol does not stimulate, but, on the contrary, depresses the central nervous system from the beginning. Schmiedeberg explained the known "stimulation effects" of the drug by assuming a depression of the inhibitory centres. Although this latter theory has won more or less general acceptance, experiments to determine the changes caused by alcohol in mental processes requiring concentration and accuracy of perception have been by no means conclusive. With a view to measuring objectively the effects of alcohol and other drugs, Mr. William McDougall and Miss May Smith carried out certain experiments in the Psychological Laboratory at the University of Oxford. Their results are published in a report recently issued by the Medical Research Council.

The first series of experiments carried out by these observers were made with the aid of a "dotting machine," which was devised many years ago by Mr. McDougall as a means of testing continuous voluntary attention. The machine is a clock-work device by which a continuous band of paper tape, 2.5 cm. wide, along whose course small circles are printed in an irregular fashion, is made to roll at a regular speed past a small opening in the framework of the machine, where the subject of the test sits. The subject is required to mark the circles with a pen as they pass before him. The tape used was six metres long and contained 1,200 small red circles and these passed before the subject's view at the rate of six per second. In each metre of tape fifteen circles were coloured blue and the subject was required to mark the red circles, but to avoid the blue. The observers first tested the effect of alcohol on the normal state, by which term they mean the normal mental condition of the subject at any particular time of day when he was not fatigued. The alcohol given was disguised with the aid of small quantities of quinine, peppermint and other drugs. It was found that when 10 c.cm. of absolute alcohol were administered, the mean number of errors increased from 80.4 just before

taking the drug to 97.3 an hour after, *i.e.*, an increase of 21%. When 15 c.cm. of alcohol were given, the increase in errors rose to 42%. After 20 c.cm. the increase was 39% and after 25 c.cm. the increase was 113%. In the latter case, however, only three experiments were carried out. These observations would appear to prove that alcohol dulled the accuracy exhibited during these experiments in the normal state. It was commonly noted that the subject, while working at the machine under the influence of the drug, believed that his efforts were particularly good, a subjective effect which was shattered when he found subsequently that there had actually been an increase in the number of errors.

The action of alcohol on the fatigued state which results from loss of sleep was next tested. The subject on three successive nights had only one and a half, three and a half and five and a half hours' sleep. The effect of loss of sleep, not followed by the administration of alcohol, as tested by the dotting machine, was at first (for a period of about three days) to decrease the number of errors and later to increase the number of errors beyond the normal variation. Thus fatigue apparently acted as a stimulant for a period of three days and then for a period of about thirteen days, as a depressant. The effect of alcohol may best be grasped from the account of an actual experiment. The subject had only one and a half hours' sleep on the night previous to the experiment. At 2.30 p.m. he was tested and the dotting errors fell to 38 from 52, which was the normal average for the preceding fortnight. He then drank 15 c.cm. of alcohol and half an hour later the number of errors made rose to 137. Four days later the subject was in the second phase of the fatigue cycle, when fatigue had acted as a depressant. This was shown by a rise in the number of errors to 109. Alcohol was again administered and the number of errors increased to 161. It was noticed, however, that towards the end of the fatigue cycle, that is, from the thirteenth to the seventeenth day, the effect of alcohol is to reduce the errors in dotting, the drug thus acting as a stimulant and improving the work done. This curious result was found to be consistent and was obtained at several experimentations. At the end of the seventeenth day the effects of fatigue completely passed off and alcohol then resumed its usual influence, *viz.*, to increase the number of errors made.

Similar experiments were carried out with opium and strychnine. It was found that the effect of these was the opposite to that of alcohol. After taking 2.4 c.cm. of the tincture of opium the subject of the experiments made 31.6% less errors with the machine. During fatigue the effect of opium was to improve the dotting during the first phase of three days and even more markedly during the second phase. Attempts were made to discover if, from the thirteenth to the seventeenth day, the drug likewise contrasted with alcohol and had a deteriorating effect, but this was not the case. The experiments with strychnine were few and inconclusive. It was found that this drug reduced the number of errors, but no experiments were made to determine its influence on fatigue.

The second series of experiments tested the memory for related words. A list of forty words, each of which had some connexion with its predecessor, was read at the rate of one word in two seconds. The subject was then told the first word and was required to reproduce the words in correct sequence. The subjective effect of alcohol was to make the subject confident that the task was a simple one and that he would have no difficulty in reproducing the words correctly. The objective result was shocking in comparison. As soon as the first or signal word was given the subject's memory failed him and the words he could reproduce were surprisingly few. During fatigue from want of sleep the observations made by the memory test were similar to those with the dotting machine and the effect of alcohol was to deteriorate the powers of memory and attention during the first phase and first part of the second phase and to stimulate the powers during the latter part of the second phase, i.e., from the thirteenth to the seventeenth day. Opium was found to improve the capacity to reproduce the related words and a similar result was observed with strychnine.

The third mode of experimentation was to test the subject's ability to concentrate his attention on two tasks simultaneously. He was required to dot the circles on the revolving tape of the machine and at the same time to listen to fifty related words read out to him at the rate of one word in two seconds. He was then asked to reproduce the words in proper sequence. The effect of alcohol was to increase the number of errors in both tasks. For example, the subject under normal conditions made, on one occasion, 51 errors in dotting and 8 in words. He drank 20 c.cm. of alcohol and when tested half an hour later there were 164 errors in dotting and 34 errors in words. The effect of opium was curious and unexpected. In some cases the dotting was improved and the ability to reproduce the words blunted; in other cases the effect was the opposite. It would appear, therefore, that the effect of opium was to make the attention oscillate between the two tasks and the subject was usually conscious of the awkward embarrassment of being unable to decide whether he should confine his attention to dotting or to the spoken words.

The investigators were asked by the Chairman of the Central Control Board of the Liquor Traffic to determine if the effect of alcohol was influenced by the degree of dilution and, further, to determine if alcohol taken with a meal had a different result to alcohol taken some hours after a meal. To elucidate the first problem two dilutions were used, viz., 20 c.cm. of absolute alcohol in 60 c.cm. of water, and 20 c.cm. of alcohol in 200 c.cm. of water. The tests were carried out at least two and a half hours after a meal. The dotting machine test was the only mode of investigation. It was found that when the concentrated solution was swallowed the increase in errors amounted to 160%; when the diluted solution was used the increase was only 22%. Thus the weaker the solution, the less marked was the objective effect. The subjective influence was likewise greater when the stronger solution was taken. The second problem was then investigated. A dilution of

30 c.cm. of alcohol in 60 c.cm. of water was used. Nine experiments with the dotting machine were done from two to eleven hours after a meal. The mean number of errors immediate before taking alcohol was 38 and the number thirty minutes after 83, an increase of 118%. Six experiments were then done immediately following a meal. The mean number of errors in dotting was 34 before taking the drug and 36 after, an increase of only 6%. Experiments with lists of related words gave results which corresponded closely. These observations would appear to prove, therefore, that 30 c.cm. of alcohol have little effect on the tests used when taken with a meal, but have a very considerable deteriorating influence when taken several hours later.

While the experiments are too few to justify any broad conclusions, they are of great importance in demonstrating the value of the modes of investigation used and will go far towards solving the problem of the pharmacological action of alcohol.

LODGE PRACTICE IN VICTORIA.

The Council of the Victorian Branch in its annual report presented to the Branch on December 1, 1920, informed the members that certain friendly societies had agreed to the terms set out in the Wasley award. The contracting orders were required to obtain central control in order that the agreements between the lodges and the medical officers should be binding. Some orders refused to obtain this central control. Continued negotiations have taken place and it is hoped that the recalcitrant orders may be brought into line within a short time. An attempt has been made by the Ancient Order of Foresters and of the Hibernian Australian Catholic Benefit Society to induce medical practitioners, both in the metropolitan and country districts, to sign agreements and to accept lists of members.

The Council of the Victorian Branch has resolved that members of the Branch must not make any arrangements with the secretaries of either the Ancient Order of Foresters or the Hibernian Australian Catholic Benefit Society until formal permission has been received from the Secretary of the Branch.

The following paragraph is culled from *The Times* (Weekly Edition) of December 17, 1920:

Lord Athlone announces that the Middlesex Hospital has received an anonymous gift of £20,000 for the endowment of the University Chair of Physiology at the Medical School of the Hospital. The gift is intended to mark the donor's appreciation of the importance of study and research in physiology as the foundation of medical science and practice.

A meeting of the Senate of the University of Sydney was held on February 7, 1921.

The degree of Master of Surgery was conferred *in absentia* upon Messrs. B. B. Barrack, M.B., W. R. Young, M.B., and G. A. Brookes, M.B.

It was resolved to advertise the following positions:

Librarian (Fisher Library), at a salary of £500 per annum, with annual increments of £40, to £700.

Lecturer in Materia Medica, £200.

Abstracts from Current Medical Literature.

MEDICINE.

(68) Tuberculosis.

Robert Philip in an article on the modern outlook on the treatment of tuberculosis contrasts the old-world pessimism with present-day hopefulness (*Edinburgh Med. Journ.*, July, 1920). The records of Nägeli (1900) established that definite indications of tuberculosis were found in 97% of bodies examined consecutively by him at Zurich; that is, of persons dying in a general hospital from all sorts of diseases and accidents. In October, 1917, Reinhart, of Berne, in a long series of consecutive *post mortem* examinations, found that 96% yielded evidence of tuberculosis. Of these 32% presented evidence of progressive lesions. In other words, approximately one third of all the patients who terminated their days from a variety of causes within a large general hospital, were the subjects of advancing tuberculosis. The writer remarks on the fallacious habit of labelling many of the finer features of early tuberculous disease as "pre-tuberculous" or "pre-disposing." The analogy between tuberculosis and syphilis is pointed out. Cases are on record where the opportunity for direct infection of tuberculosis was afforded at a given date by accident, such as a cut from a broken infected sputum jar, or in carrying out an autopsy on a tuberculous cow, where a local sore or warty tumour appeared within four weeks. The duration of incubation of tuberculosis has been definitely determined experimentally in various animals, e.g., in the guinea-pig, where, following the subcutaneous introduction of tubercle bacilli, a local induration—or chancre—appears commonly about the fifth day. Following the primary entrance, there succeeds a further period of latency (second incubation). After an interval of time, lymphatic glands become involved, first the glands on the same side and in the vicinity of the point of entrance, then glands at a greater distance on the same side and thereafter the glands more widely. An unnecessary sharp line has been drawn between inoculation by way of inhalation and by way of ingestion. Childhood is the period during which tuberculosis is most frequently acquired. What has been called the infantile type of tuberculosis, where glandular lesions are especially in evidence, with gross enlargement and associated changes, is common at that period. But commoner still is the gradual passage of the tuberculous infection without very striking superficial evidence. While the disease may seem to be arrested or may run a fatal course at the lymphatic stage, as was illustrated among the Senegalese troops in France, the infection commonly passes more widely through the system, spreading by continuity of structure or by way of the circulation.

Reaching the blood channel, either by way of the thoracic duct or suddenly, e.g., by direct passage from a gland into a vein, the bacillus may induce a focal lesion almost anywhere, either in the bony skeleton or in viscera. The local effects do not constitute the chief or ultimate danger of tuberculosis. The significant factor is the systemic intoxication which sooner or later results from the bacillary invasion. The tuberculous "toxins" seem to act especially on neuro-muscular structures. Their dystrophic influence is evidenced by loss of sarcous substance and associated irritability of muscle. These neuro-muscular effects are generally in evidence, even in pulmonary tuberculosis, long before cough or expectoration or other indication of local lesion is present. Philip holds that for the diagnosis of tuberculosis the production of tubercle bacilli should not be demanded. Tuberculin tests are serviceable. The subcutaneous test gives positive or negative evidence of highly important character. Serological methods have yielded less convincing results in tuberculosis than in syphilis. A point of much importance is the extraordinarily prolonged course frequently followed by tuberculosis. In some of the author's cases tubercle bacilli were discovered more than twenty years previously and had been found at successive intervals up to the date of writing. In two cases of lung disease there was a record of extensive cavitation throughout twelve and twenty years. The author remarks on the accelerating drop in the death-rate from tuberculosis. The progressive decline throughout the past fifty years is remarkable. Omitting the last five years as being unusual on account of the war and taking twenty-five years previous to that, the comparable figures of the mortality from pulmonary tuberculosis in England and Scotland are of interest. In 1890, for England, a death-rate of 168 per 100,000, as against 116 in 1915, i.e., a drop of 30.9%; for Scotland, in 1890, a death-rate of 193 per 100,000, as against 111 in 1915, i.e., a drop of 42.4%. In addition to the fall in the death-rate, the age at death is gradually being postponed.

(69) Mumps.

C. Wesselhoft reviews the knowledge concerning the aetiology, mode of transmission, incubation and period of infectivity of mumps (*Military Surgeon*, January, 1920). Cases are on record in which the first manifestation was orchitis, with subsequent involvement of the salivary glands. Ophoritis is not an uncommon complication in women. The causative factor remains undetermined. It is obvious that the disease is infectious and contagious. A diplococcus has been isolated from Stenson's duct and from the parotid glands in the acute stage, but it is doubtful whether this diplococcus is the causative factor. Wollstein's work demonstrates the fact that the disease is associated during the acute stage with a filterable virus in the saliva. No bacteria are grown by ordinary aerobic and anaerobic methods,

but when the saliva is inoculated into the parotids of young, healthy cats, a definite parotitis is produced; this is not manifested in the controls. Defibrinated blood from patients suffering from parotitis, when injected into the parotid glands of cats, produced a parotitis. It is a reasonable supposition that the virus spreads from the parotid to the testicles *via* the body rather than by the hand *via* the urethra, as is held by some. The blood serum after recovery has an inhibitory action on the virus. The long incubation period favours the administration of this serum as a prophylactic. Transmission is by direct and indirect contact, e.g., kissing, the common use of a pipe infected by one person. As an example of the spread of the disease by hand, a case is quoted where a doctor carried the disease from a mumps patient to another patient, who became infected, while the doctor escaped. A patient suffering from diphtheria was placed in a bed previously occupied by a mumps patient. Although the bedding had been subjected to steam for two hours and to dry heat at 100° C. for another two hours, the patient developed mumps eighteen days after admission. There is an instance on record of mumps being transmitted from a boy to a dog. The incubation period is given as ranging from 3 to 35 days, or longer; the average, varying with different authors, from 14 to 25 days. Orr's work brings out a definite eighteen-day cycle of periodic infectivity during an epidemic of mumps. The author concludes that the average incubation period is approximately 18 days. Mumps is infectious during the prodromal stage. It is usual to assume that the infectivity lasts as long as the symptoms. With sporadic cases a 21-day quarantine period, dating from the onset of the symptoms, would be safest. A definite time-limit cannot be established, because parotid hypertrophy may follow mumps.

(70) A Spinal Sign in Gastric Crises of Tabes.

W. Browning (*Medical Record*, October, 1920) has recently drawn attention to a phenomenon of considerable value in the diagnosis of gastric crises, which appears to have received but scant notice in the classical descriptions of this condition. The author maintains that a small area of cutaneous hyperaesthesia is constantly present, situated to the left of the spinal column, about the level of the fifth dorsal interspace. The presence of skin tenderness is demonstrated by gentle stroking of the skin, which produces a sensation of pain when the affected area is reached. The occurrence of this phenomenon is regarded as evidence of a radicular or spinal, rather than a central, origin of gastric crises. It is suggested that counter-irritation of the skin at the hyperaesthetic area fulfils the rational therapeutic indication, in contradistinction to the usual practice of administering morphine hypodermically. The author advocates counter-irritation by rubbing in blue ointment or a 25% ointment of oleate of mercury. Irradiation

of the affected region is also suggested for the treatment of severe or recurrent attacks.

NEUROLOGY.

(71) Jacksonian Epilepsy.

René Leriché (*La Presse Médicale*, September 15, 1920) observed three important facts in cases of Jacksonian epilepsy following war wounds of the head. It was noticed, firstly, in a brain exposed for operation that the Jacksonian crisis was accompanied by a brusque spasm of the arteries crossing the epileptogenous zone and that this spasm induced decided cortical anæmia. Secondly, in a number of cases there was hypotension, absolute or relative, of the cerebro-spinal fluid. Thirdly, in one case, the brachial artery of the convulsed arm was in a state of constant dilatation and ligation of the artery successfully modified the peripheral sensations initiating the convulsion. On these grounds he thought that patients suffering from Jacksonian epilepsy, who had been already operated on at the site of injury without relief, might be benefited by one of the following proceedings: The old operation of sympathectomy, recommended by Alexander, to modify the encephalic circulation; or the injection subcutaneously twice a day of small doses (150 c.cm.) of artificial serum, to maintain the cerebral equilibrium; or ligation of the brachial artery, a safe operation, to produce vaso-constriction.

(72) Congenital Familial Muscular Atrophy.

Knud H. Krabbe (*Brain*, Vol. XLIII, Part 2) gives a full clinical and pathological record of six cases of congenital familial spinal muscular atrophy and specially considers the relation of the condition to *amyotonia congenita*. He says that true *amyotonia congenita* (*myotonia congenita*, Oppenheim) is a benign disease, which is characterized by congenital hyperflexibility and weakness and is not associated with atrophy. If the patient does not die from intercurrent disease, the muscular disability may gradually pass off and by the time adult life is reached no defect may be discoverable. It is not familial and can possibly be considered as a retarded development of the muscles. The condition described by Krabbe has a certain clinical resemblance to *amyotonia congenita*, but differs from it in that the muscles show a decided atrophy, which is demonstrable by means of the X-rays during life, as well as with the microscope after death, and in that it has a tendency to progression or, at any rate, no tendency to improvement and in that, for a certain number of cases, it can be shown to be familial. Furthermore, anterior corneal changes may be found in the spinal cord, bringing it into relation with the Werdnig-Hoffmann type of muscular atrophy.

(73) Neurosyphilis and its Treatment.

At a meeting of the Neurological Society of Paris, J. A. Sicard opened a discussion on the subject of neuro-

syphilis and its treatment (*Revue Neurol.*, No. 7, 1920). He first considered the question of the unity or plurality of the virus—the neurotropic and the dermatropic virus—and championed the doctrine of unity. His chief objections to the plurality doctrine were, firstly, that other known organisms, for example, the *Bacillus lepræ*, might produce dual lesions and, secondly, that attempts to inoculate human beings suffering from general paralysis with virus derived from chancres (experiments of Krafft-Ebing and additional experiments by Sicard) had proved negative. Clinically, he divided cases of neurosyphilis into two groups: (i.) Primary, arterial neurosyphilis, accompanied by meningitis and secondary parenchymatous lesions. (ii.) Parenchymatous neurosyphilis, with secondary meningo-vascular and chronic meningitic changes (illustrated by tabes and general paralysis). As indispensable aids in clinical diagnosis, four reactions were referred to, viz., examination of the blood after the Bordet-Wassermann method and examination of the cerebro-spinal fluid in three different ways, viz., cytological examination, examination for albumin and examination by the Bordet-Wassermann method. Therapeutically, of all tried forms of treatment, mercury and, above all, novarsenic, employed in classical ways stand apart in having proved their value. Intrathecal medication, in spite of published favourable results in France and elsewhere, is still on its trial. Intracranial medication has been abandoned. It appeared that no drug surpassed novarsenic in its action upon neurosyphilis. It produced benefit after all other drugs had failed. To obtain its best effect, it was advisable to give a prolonged course of repeated small doses.

(74) The Cerebro-Spinal Fluid in Epidemic Encephalitis.

Piero Boveri (*Journ. of Nerv. and Ment. Dis.*, New York, October, 1920) examined the cerebro-spinal fluid in 16 cases of lethargic encephalitis and found changes which, although slight, were undeniably abnormal. The changes were slight increases in the number of lymphocytes, in the amount of albuminoids present and in the reducing power of the fluid. These changes were present in all phases of the disease, but perhaps more decided in the earlier stages, and the different types—lethargic, myoclonic and mental—did not present special characters. These facts are of importance from the point of view of diagnosis and can only be detected by accurate observation.

(75) Malingering.

Joseph Catton (*Military Surgeon*, December, 1919) writes chiefly concerning malingering as he saw it in the United States Army. He states that, while out and out malingering was rare, the minor forms were frequent and required careful consideration. His conclusion is that frank malingering should not be accepted as a diagnosis until the following four questions have been answered in the affirmative: Is organic disease absent? or, if all apparent signs of

previous injury are absent, can it be said that there is no aftermath? (2) Is hysteria absent? (3) Has the patient confessed to feigning, or can the proof of fraud be objectively demonstrated? (4) Does examination of the mental state exclude psychoneurosis, psychosis, inebriety, mental deficiency and constitutional psychopathy.

(76) Acidosis in Certain Nervous Disorders.

B. H. Shaw has frequently found evidence of acidosis in patients admitted recently to mental hospitals, especially in those suffering from acute delirium, melancholia, confusional and stuporose states and epilepsy (*Journ. of Mental Science*, July, 1920). In view of the profound structural alteration in the neurone which results from this acidosis and the extreme danger of permanent injury from continuance of the condition or from frequent attacks, there is urgent need for early diagnosis, the more so since diagnosis is simple and treatment, as a rule, efficient. If such patients were sent to a general hospital before serious mental symptoms ensued, there would soon be a marked diminution in the admission rate of mental hospitals. In view, also, of the fact that acidosis is a probable aetiological factor in epileptic states, there is need for careful investigation. It is possible that efficient alkaline treatment may stop the epilepsy if the acidosis be recognized at the onset of the fits. The giving of bromides in such a blood state would be dangerous, as only cellular activities would be dulled. The predisposition to microbial diseases afforded by acidosis, above all, to tuberculosis, is yet another matter calling for investigation.

(77) Potassium Boro-Tartrate in the Treatment of Epilepsy.

Pierre Marie, Crouzon and Bouttier, of the Salpêtrière, Paris, claim good results in the treatment of epilepsy with potassium boro-tartrate (*La Presse Médicale*, October 9, 1920). They prescribe it in daily doses of three grammes. They quote a number of cases in support of their claim. The drug is well borne by both young and old and it is effective in all forms of the disease—*petit mal*, *grand mal* and Jacksonian epilepsy. It may even influence the mental state in epileptic insanity and it has the advantage over bromides, that it does not cause mental depression, gastric disturbance or rash. It is well known that in the treatment of epilepsy the psychic effect of a new drug may have a happy influence, but the writers think their trials have been sufficiently extensive to exclude this factor. They have observed that temporary interruption of the treatment has had a baneful effect. If it is desired to combine boro-tartrate with other drugs, e.g., bromides, luminal, veronal, it is better to practise alternation than to exhibit the drugs in one mixture. In conclusion, the writers look upon the boro-tartrate of potassium as the drug of choice in the treatment of epilepsy and as it is freely soluble in water and pleasing to the taste, they prescribe it in water alone.

British Medical Association News.

MEDICO-POLITICAL.

Meeting of the Federal Committee.

The Federal Committee of the British Medical Association in Australia met at the Medical Society Hall, East Melbourne, on February 1 and 2, 1921. The following representatives were present: New South Wales Branch, Dr. R. H. Todd, Dr. J. Adam Dick, C.M.G.; Queensland Branch, Dr. W. N. Robertson, C.B.E., Dr. J. Lockhart Gibson; South Australian Branch, Dr. W. T. Hayward, C.M.G., Dr. H. S. Newland, D.S.O.; Victorian Branch, Mr. G. A. Syme, Dr. R. H. Fetherston.

It was announced that the representatives of the Western Australian and Tasmanian Branches had been prevented from attending owing to travelling difficulties.

Appointment of Office-Bearers.

Dr. W. T. Hayward was elected Chairman, Mr. G. A. Syme Vice-Chairman, Dr. R. H. Todd Honorary Secretary and Treasurer and Dr. W. H. Crago Honorary Auditor.

Congratulations.

Dr. Hayward moved from the chair that the congratulations of the Committee be conveyed to Dr. Robertson on the honour of Commander of the Order of the British Empire conferred on him by His Majesty. The motion was carried by acclamation.

Dr. Robertson thanked his colleagues for their hearty congratulations.

On the motion of Mr. Syme, it was resolved to convey to Sir Jarvie Hood the congratulations of the Committee on the occasion of his having received the honour of knighthood.

Dr. W. N. Robertson moved and Dr. Newland seconded that letters of congratulation be sent to Sir Dawson Williams, the Editor of the *British Medical Journal*, and Sir S. Squire Sprigge, the Editor of *The Lancet*. It was pointed out that this was the first occasion that medical journalists had received official recognition. The motion was carried.

Financial Statement.

Dr. R. H. Todd, in his capacity as Honorary Treasurer, presented a financial statement covering the period since the last meeting of the Committee, duly audited by the Honorary Auditor, Dr. W. H. Crago.

Correspondence.

A communication from Dr. J. W. Springthorpe, forwarded by the Victorian Branch to the Honorary Secretary, dealing with a proposal to institute a board of inquiry into the defects of organization in the medical services during the war, was read. The Victorian Branch had asked that the Federal Committee should consider the matters raised. During the course of a short discussion, it was emphasized that the proposals put forward were based on an assumption that the Federal Government would desire to examine alleged defects in the organization of the medical services. This matter had no connexion with the reorganization of the Army Medical Corps which was the subject of inquiry at the present time. While the Committee was not prepared to advocate that such an inquiry as was contemplated by Dr. Springthorpe should be held, the members concurred in the suggestion that civilian evidence would be valuable in examining the administration of the medical services during the war. It was eventually resolved on the motion of Dr. R. H. Todd, seconded by Dr. J. A. Dick:

That in the event of such a commission of inquiry being established, the Minister be communicated with and asked that there should be representation of civilian medical men on the board or, in the alternative, that evidence should be obtained from civilian medical men.

Relationship of the Overseas Branches to the Parent Association.

The Honorary Secretary read a letter addressed to the several Branches in Australia relative to the proposal to send a representative to the conference which had been summoned by the Annual Representative Meeting to dis-

cuss the alterations of the Articles and By-laws of the British Medical Association necessary to give effect to the proposals to grant greater autonomy and freedom of action to the overseas Branches. Replies had been received from all the Branches, approving of the suggestion that a representative be sent to England for this purpose. The Queensland Branch had called attention to the financial difficulties and had inquired if the Council of the Association would be prepared to defray the expenses of the representative. The Victorian Branch had found a means of providing its proportion of the amount required.

The Honorary Secretary reported that a communication had been sent to the New Zealand Branch, asking whether any action were contemplated in connexion with the question under discussion. No reply had been received.

After a full discussion it was resolved on the motion of Mr. Syme, seconded by Dr. Dick:

That for the purpose of sending a representative to England, a request for a supplementary grant under By-law 24 of 7s. 6d. per member be forwarded to the Council by cable on behalf of the Branches in Australia. Dr. J. Lockhart Gibson then moved:

That a representative be appointed to attend the conference to be held in England in 1921.

The motion was seconded by Dr. W. N. Robertson and carried unanimously.

It was further moved by Dr. W. N. Robertson, seconded by Dr. H. S. Newland and resolved:

That Dr. R. H. Todd be appointed the representative of the Branches of the British Medical Association in Australia.

At this stage a full discussion took place on the desires of the Australian Branches. It was felt that the representative should be instructed on the important points at issue. The Honorary Secretary referred to the correspondence that had passed between the Federal Committee and the Council of the Association on the subject. It has been set out that the Australian Branches desired authority to enable them to carry out any or all the objects of the Association as set out in the Memorandum of Association, permission to register under the Companies Acts as companies conducted not for gain, power to establish a Federal Council to carry out the several objects of the Association and the right to determine the amount of the annual subscription of members without previous reference to the Council in London. The last named matter had been adjusted at the last Representative Meeting.

The Chairman read the chapter of the Annual Report of the Council of the Association dealing with the question of the relations of the overseas Branches to the parent Association (see *British Medical Journal*, Supplement, April 24, 1920, p. 109). From this document it was gathered that the Council was anxious to meet the wishes of the Australian Branches and that it had taken steps to overcome existing difficulties. The Report of the Council had been adopted unamended by the Representative Body at Cambridge on June 25, 1920.

In the course of further discussion it was pointed out that the Australian Branches desired to obtain power to carry out medical benevolence, to undertake the work of medical agency, of medical defence and of medical insurance. These matters had been included in the draft charter for which the Association had applied in 1907. Under the *Companies Act* these powers had not been granted to the Association. It was an instruction to the representative to bear these points in mind and, if the constitution of the Association enabled affiliated bodies to secure these powers, to make provision for their acquisition by the Australian Branches.

The Chairman stated that the policy of the Branches in Australia was to seek greater autonomy and freedom of action, while the ties binding them to the parent Association were preserved and strengthened. It was of the utmost importance that nothing should be done which might endanger their relations with the great Association. The Council in London should be assured that the Branches in Australia were absolutely loyal to the British Medical Association.

General instructions were also given in regard to the question of interchangeability of membership as between the parent Association and any Branches in Australia in the event of the latter becoming affiliated bodies.

On the motion of Mr. G. A. Syme, seconded by Dr. H. S. Newland, it was resolved.

That Dr. R. Gordon Craig and Dr. D. H. E. Lines be appointed additional representatives to co-operate with Dr. R. H. Todd at the conference.

Travelling Expenses of Members of the Federal Committee.

The Honorary Secretary read a letter from the Medical Secretary, conveying the approval of the Council of the amendment of Clause 5 of the constitution of the Federal Committee to enable the Committee to pay the travelling and personal expenses of the members attending its meetings (see *The Medical Journal of Australia*, September 11, 1920, page 252). It was noted that the amended rule became effective on December 8, 1920.

A discussion followed on the question as to how far it would be possible to apply the amended rule under existing conditions. It was pointed out that the fares of two representatives of each Branch attending a meeting of the Federal Committee in Sydney or Melbourne would amount to £175, while the contributions of the Branches of 2s. per member would represent only about £300 a year. Various suggestions were made and in the end it was resolved on the motion of Dr. W. N. Robertson, seconded by Dr. H. S. Newland:

That when two representatives attend from any one State, half the fares be paid and that when only one representative attends, the full fare be paid.

Annual Subscription of Members of Branches in Australia.

The Honorary Secretary read a letter from the Council of the New South Wales Branch, suggesting that notice should be given of a motion to be presented at the next Representative Meeting with the object of restoring the subscription of members of overseas Branches as fixed by the British Medical Association to its former level of £1 5s. The action of the Representative Body at Cambridge in July, 1920, had been very embarrassing to the Australian Branches in view of the necessity for a relatively large expenditure in connexion with organization work within the areas of the Branches. The members were not prepared to pay a greatly increased amount of money for organization purposes in Great Britain. The members generally expressed the opinion that the time for instituting the change had been unwisely chosen, since the question of the relations of the overseas Branches with the parent Association was shortly to be considered at the conference. The original suggestion was modified after discussion on the suggestion of Mr. G. A. Syme, seconded by Dr. H. S. Newland and was adopted in the following form:

That notice of motion be given by the New South Wales Branch at the next Representative Meeting in England that the annual subscription of members in Australia be £1 10s. instead of £2 2s. as at present and that the other Branches be asked to instruct their representatives to support the motion.

Repatriation Assistance to Returned Medical Men.

The Honorary Secretary read the correspondence between the Comptroller of the Repatriation Department and the Federal Committee relative to the granting of assistance to medical men on their return from war service to medical practice (see *The Medical Journal of Australia*, September 11, 1920, page 252). The following letter had been sent to the Comptroller on September 23, 1920:

Sir:

In further reference to the above matter, I am requested to thank you for your very full and carefully written letter of 22 April last in reply to the communication of the Federal Committee of the British Medical Association in Australia of 7th February, 1920.

The matter was again before the Federal Committee at its meeting of the 25th ultimo, when I was requested respectfully to invite the Commissioners:

(1) in regard to Regulations 108 (Tools of Trade and Equipment) and 109 (Supply of Tools of Trade, etc., under Hire Purchase Agreement), to interpret such Regulations as extending to medical practitioners who were in practice before going to the war, as well as to those who were not in practice; and

(2) in regard to Regulation 112 (Business Plant, etc.) to extend the provision of such Regulation so as to enable a State Board to advance by way of loan a sum of not exceeding £150 or in special cases £250 to a medical practitioner.

If the Commissioners are kind enough to give further consideration to this matter, the Committee trusts that they will find that the proposals submitted are in the interests of the returned soldiers and are in full accord with the spirit of the Act.

Faithfully yours,

(Signed) R. H. TODD,

Honorary Secretary, Federal Committee of the British Medical Association in Australia.

To this letter the following reply had been received:

Department of Repatriation,
Headquarters, Melbourne,
September 30, 1920.

The Honorary Secretary,

Federal Committee of the British Medical Association.

Dear Sir:

The Commission has had under consideration your letter of the 23rd September with reference to the above. The Commission had already decided on the 9th *idem* to approve of grants under Regulations 108 (Tools of Trade and Equipment) and 109 (Supply of Tools of Trade, etc., under Hire Purchase Agreement) to returned medical officers who sold their practices and instruments in order to enlist and do not now possess them. This is in addition to returned medical officers who enlisted immediately upon graduation and did not possess their professional instruments. The Commission cannot see its way to make any further extension in these provisions.

Regarding Regulation 112 (Business, Plant, etc.), the Commission has also fully reconsidered this matter and cannot see its way to approve of advances by way of loan under the regulation to medical practitioners. This regulation was intended to cover only the cases of men who could not be repatriated by being vocationally trained or placed in employment, etc., and where there was reasonable assurance that by the expenditure of a moderate amount in or obtaining a small business, a soldier could be satisfactorily repatriated.

Faithfully yours,

(Signed) J. W. SEMMENS,
Chairman, Repatriation Commission.

The reply was regarded as very unsatisfactory, but it was recognized that the time had passed for making a strenuous effort to obtain more equitable provisions in the regulations. On the motion of Dr. R. H. Todd, seconded by Dr. Robertson, it was resolved:

That a letter be sent to the Department of Repatriation, expressing the regret of the Federal Committee at the decision arrived at by the Commissioners.

Medical Treatment of Discharged Soldiers.

The Honorary Secretary read further correspondence between the Department of Repatriation and the Federal Committee dealing with the adoption of the scale of fees recommended for medical services required for discharged soldiers. Considerable delay had taken place in regard to this matter and the Department had taken no action to alter the terms as set forth in circular "L." It was thought that medical practitioners, on realizing that continued treatment of discharged soldiers would be remunerated at the rate of 2s. 6d. a visit, would withdraw from the work. The members expressed the opinion that strong representations should be made to the Minister to adopt the scale of fees previously put forward by the Committee. It was therefore resolved:

That the Chairman, Dr. W. N. Robertson and any other member of the Federal Committee wait upon the Minister of Repatriation, Mr. Rodgers, and urge the acceptance of the amended terms as set out in the letter to the Commission of October 18, 1920.

Reorganization of the Army Medical Services

The Honorary Secretary explained that as a result of the deputation from the Committee to the Minister of De-

fence on July 31, 1919, steps had been taken to remind the Minister of his promise to consult the British Medical Association before the reorganization of the Army medical services was completed. The Committee had been invited to set out its views in writing for consideration by a committee of inquiry. It had been hoped that views on several points could be explained directly to the committee. Shortly before the meeting of the Federal Committee a telegraphic request had been received from the Department for representatives to attend the committee of inquiry. Mr. Syme and Dr. Fetherston had attended and had submitted the views of the Federal Committee. The Federal Committee desired to emphasize the importance of the payment of an adequate salary to the Director-General Medical Services, that the Director-General report directly to the Minister and not through the department of the Adjutant-General, that the Federal Committee be given an opportunity of examining the general plan of reorganization in so far as the provisions affected medical matters before the new regulations were finally drafted and adopted and lastly that the rate of pay of medical officers be re-adjusted. It was decided to ask the Minister of Defence to receive a deputation from the Federal Committee and that these opinions be explained to him.

The Victorian Branch submitted a letter, calling attention to the anomaly of the difference of the remuneration of medical officers under the Department of Defence working in military hospitals and of that of medical officers carrying out analogous work under the Department of Repatriation. The Department of Repatriation would be responsible for the maintenance of the military hospitals after the end of March. At present the medical officers were receiving pay according to rank. The pay of a captain was 22s. Under the Repatriation Department the pay of medical officers was £2 10s. a day. It was suggested that the Department of Repatriation might make up the difference when it accepted the financial responsibility for the military hospitals. It was therefore resolved:

That in addition to putting before the Minister the views of the Committee regarding the reorganization of the Army Medical Corps, the Committee ask the Minister to consider the rate of pay of medical officers at the military hospitals after April 1, 1921, when the hospitals will be under the financial control of the Department of Repatriation. The salaries now paid by the Department of Repatriation (£2 10s.) are recommended.

Examination of Totally Incapacitated Soldiers for Central War Gratuity Board.

The Honorary Secretary read a letter from Brigadier-General Wisdom of the Central Gratuity War Board, dated September 11, 1920, informing the Federal Committee that his Board required a medical examination of and report on claimants for cash payments of the war gratuity to which totally and permanently incapacitated soldiers were entitled. This examination had been carried out by the area medical officer, but it had been found that in many instances there was no area medical officer in the district. It was therefore proposed to order the claimant to report to the nearest medical practitioner to his place of residence. The Board asked the Federal Committee whether the members of the British Medical Association would undertake this examination for a fee of 10s. 6d. As the matter was one of urgency, the Chairman had authorized the Honorary Secretary to ascertain from the several Branches whether the fee would be satisfactory. An affirmative reply had been received from all the Branches and General Wisdom had been informed of this decision. It was resolved that the action of the Chairman be approved.

Deportation of Max Herz.

The Honorary Secretary reported the events concerning the steps that had been taken to induce the Federal authority to carry out the sentence of deportation of Dr. Eugen Hirschfeld and Dr. Max Herz. It had been reported in the daily press that the former had been removed from the Commonwealth. In regard to Max Herz, repeated representations had been made to the Prime Minister urging that the deportation of this undesirable person of alien enemy origin, which had been ordered by the Aliens Board, be carried out without further delay. The allegation that

he possessed special skill as an orthopaedic surgeon sufficient to render his presence in Australia of particular value to the citizens of the Commonwealth, was not well founded. The members expressed indignation that Max Herz was apparently enjoying all the privileges of Australian citizenship, notwithstanding the fact that the authorities had found it necessary to intern him during the war and to order his banishment from Australia after the conclusion of peace. It was resolved:

That the correspondence be received and that a further letter be written to the Prime Minister, asking for a reply to the letter of October 16, 1920, as promised in the letter of the Secretary of the Prime Minister's Department of October 22, 1920.

"Who's Who in the Commonwealth."

The correspondence dealing with the publication entitled "Who's Who in the Commonwealth" was read and some discussion ensued concerning its value to the community. It was urged on the one hand that those who responded to the invitation of the publishers to provide biographical details, did so from vanity and on the other hand that a biographical record of men of undoubted eminence was both useful and interesting. A proposal to the effect that no objection should be taken to the supplying of biographical details for publication in a book deemed by the Federal Committee to be a worthy one, provided that the information corresponded to that given in the well-known British "Who's Who," was negatived. The majority of members considered that this kind of publication was undesirable, while a medical directory served a very useful purpose. It was determined that no further action be taken.

Federal Income Tax.

The Victorian Branch had brought to the notice of the Federal Committee the fact that in certain instances the Federal Income Tax Commissioner disallowed deductions for income tax purposes of money expended on the purchase of medical journals, while the deductions were allowed by the State Income Tax Commissioner. The Honorary Secretary reported that it had been held by the New South Wales Commissioners that money expended on the purchase of medical books and journals was capital outlay. According to the *Income Tax Assessment Act, 1915-1918*, deductions were allowed for money spent wholly in the production of income. The members maintained that medical journals were purchased solely for the purpose of earning income and acquiring medical knowledge for professional purposes. Medical journals possessed only ephemeral value. It was therefore moved by Dr. R. H. Todd, seconded by Dr. J. A. Dick and resolved:

That the Federal Income Tax Commissioner be communicated with and a request be made that the deduction be allowed on the ground that the money expended on the purchase of medical journals is money expended in the production of income.

Remuneration of Ships' Surgeons.

The South Australian Branch forwarded a communication received from an ex-ship's surgeon, calling attention to the low rate of pay and suggesting that steps be taken to remedy this state of affairs. Ships carrying passengers and crew aggregating fifty persons were required to carry a ship's surgeon. The rate paid by a certain company was stated to be £18 a month, a rate of payment slightly lower than that of the ship's firemen. A short discussion took place and it was determined:

That information be collected in regard to shipping controlled by the Commonwealth Navigation Laws and that a report be submitted to the next meeting.

Medical Congress.

A letter was received from the Royal Society of South Australia, conveying a resolution of that Society endorsing two resolutions of the Australasian Medical Congress, Brisbane, 1920, referring to the preservation of Australian flora and fauna. The correspondence was received.

A motion submitted by the Queensland Branch was allowed to stand over.

The Committee considered the measures that should be adopted in order to carry on a medical congress. The following resolutions were carried:

(i.) That steps be taken to establish a medical congress in accordance with the resolution of the Federal Committee as follows:

That steps be taken by the Federal Committee to organize British Medical Association Medical Congresses to come into operation upon the winding up of the Australasian Medical Congress, such congresses to be undertaken by the Federal Committee on behalf of the Branches in Australia collectively, the New Zealand Branch being invited to co-operate.

(ii.) That the name of the congress be "The Australasian Medical Congress (British Medical Association)."

(iii.) That the objects of the congress be made to conform generally *mutatis mutandis* to those of the Annual Meeting of the British Medical Association.

(iv.) That the first congress be held in 1923.

(v.) That a letter be sent to the New Zealand Branch, enclosing a copy of the resolutions just passed and inviting their co-operation.

A discussion ensued on the place of meeting of the first congress. It was recognized that, as no official invitation had been received by the Federal Committee, no definite step could be taken. It was felt, however, that the Branches should be informed of the procedure necessary for the selection of a place of meeting. Mr. G. A. Syme moved and Dr. Newland seconded:

That a letter be sent to each Branch, advising of the resolutions just carried and that in taking these steps the Committee wishes it to be understood that the congress will start *de novo*, that the previous sequence will not necessarily be continued and that it will be glad to receive invitations from any Branch to hold the 1923 congress in its State or Dominion, so that the Committee may decide at its next meeting where the congress shall be held.

The Honorary Secretary pointed out that the organization of the congress would be more effectively planned if the task were referred to a small sub-committee. It was therefore resolved:

That a sub-committee of the Chairman, Dr. W. T. Hayward, Dr. R. H. Todd and Dr. J. Adam Dick, with power to co-opt, be appointed to formulate a draft constitution for the congress, including rules and standing orders, for consideration by the Federal Committee at its next meeting.

Acting Honorary Secretary.

It was resolved that Dr. J. Adam Dick be appointed Acting Honorary Secretary during the absence of Dr. R. H. Todd.

A sub-committee was appointed, consisting of Dr. G. A. Syme, Dr. R. H. Fetherston and Dr. J. Adam Dick to consider the several questions arising out of the reorganization of the Army medical services.

Next Meeting of the Federal Committee.

It was resolved that the next meeting of the Federal Committee should be held in Sydney in July, the exact date to be fixed by the Chairman.

Votes of Thanks.

Dr. W. N. Robertson asked the Committee to place on record its high appreciation of the services which Dr. F. S. Hone had rendered to the Federal Committee during his long association with it. His services had been of an extremely valuable character.

Dr. Hayward supported the motion and referred to the sound, statesmanlike views of Dr. Hone. The motion was carried with acclamation.

Hearty votes of thanks were, passed to the Council of the Victorian Branch for the use of the Medical Society Hall and for their hospitality and to the Chairman for the manner in which he had conducted the meeting.

A meeting of the Queensland Branch was held in the B.M.A. Room, Adelaide Street, Brisbane, on January 21, 1921, Dr. R. Graham Butler, the President, in the chair.

The meeting had been convened to receive and consider a report of a sub-committee appointed to examine the conditions of lodge practice.

Dr. J. M. Thomson drew attention to a circular letter that had been sent to the lodges in 1914, in which it was stated that the members of the Queensland Branch of the British Medical Association guaranteed that no change would be initiated by them for a period of five years. He desired to know whether the Model Lodge Agreement was in operation in 1914 or whether it first became a binding contract in 1919, when the financial clauses were enforced. In the latter case, no increase in the rates could be demanded at the present time.

The President pointed out that the lodges agreed to the Model Lodge Agreement in 1914. The contribution rate for members was allowed to remain at the old level on account of the war.

After further discussion it was moved by Dr. A. B. Brockway, seconded by Dr. A. B. Carvosso and resolved:

That the time count from 1914.

It was decided to take the clauses of the report of the sub-committee *seriatim*.

Clause I.—That there be an increase in lodge fees to 25s. per member per annum.

Dr. L. P. Winterbotham moved and Dr. F. W. Page seconded:

That the matter of increase in lodge fees to 25s. be postponed for six months until all members have brought their lodges up to the 20s. rate.

The motion was put to the meeting and was lost.

On the motion for the acceptance of the recommendation by Dr. A. C. Carvosso, seconded by Dr. A. B. Brockway, Dr. L. P. Winterbotham moved as an amendment, seconded by Dr. J. L. Selwood:

That the rate be 26s. per member.

The amendment was carried.

Clause II.—That the rate of single female members be 15s.

This clause was adopted.

Clause III.—That the confinement fee be increased to £3 3s.

This clause was also adopted.

Clause IV.—That the maximum be a three mile limit by road from the doctor's residence or the lodge room, as agreed upon by the medical officer and the lodge.

Dr. Brockway and Carvosso proposed the adoption of this clause.

Dr. Winterbotham moved as an amendment, seconded by Dr. J. M. Thomson:

That the mileage be three miles for members in the city of Brisbane area and two miles for members in suburban areas from the doctor's residence or lodge room.

The amendment was carried.

Dr. W. S. Webb moved and Dr. A. B. Brockway seconded: That this apply to the city of South Brisbane area also.

This rider was adopted.

Dr. J. L. Selwood moved and Dr. F. C. Bechtel seconded:

That the words after "doctor's residence" in the original clause be deleted.

This motion was carried.

An attempt to reverse to determination in favour of the original recommendation was made, without success.

Dr. W. S. Webb then moved and Dr. C. J. Weedon seconded the following motion, which was carried:

That this mileage limit from the doctor's residence by road may apply to old members and shall apply to new members.

Clause V.—That the maximum salary of a bachelor when joining a lodge be £260 and of a married man £365 and that they cease to enjoy the medical benefits of the lodge when as a bachelor he receives £312 or as a married man £416 per annum.

This clause was adopted.

The report, as amended, was then put to the meeting and carried. It was resolved that the new agreement should come into force on April 1, 1912, and further that the resolution should be forwarded to the Council with instructions to take the necessary steps to have them carried into effect.

The undermentioned have been elected as members of the Queensland Branch:

- C. D. Barlow, Esq., M.B., Ch.M. (Univ. Syd.), 1918.
 N. A. L. Anderson, Esq., M.B., Ch.B. (Univ. Melb.), 1920.
 E. W. Rivett, Esq., M.B., (Univ. Syd.), 1920.

THE REORGANIZATION OF THE ARMY MEDICAL SERVICES.

Deputation to the Minister of Defence.

The Chairman of the Federal Committee, Dr. W. T. Hayward, C.M.G., Dr. Adam Dick, C.M.G., Dr. R. H. J. Fetherston, Dr. J. Lockhart Gibson, Dr. H. S. Newland, D.S.O., Dr. W. N. Robertson, C.B.E., Mr. G. A. Syme and Dr. R. H. Todd waited on the Minister for Defence, the Honourable G. F. Pearce, on February 2, 1920, to explain the views of the Federal Committee concerning the reorganization of the Army medical services. The Director-General Medical Services, General G. Cuscaden, was also present.

Dr. Hayward informed the Minister that on July 31, 1919, the Honourable E. J. Russell, then Acting Minister for Defence, had received a deputation from the Federal Committee and had been requested to give the British Medical Association an opportunity of stating the views of its members before any scheme for the reorganization of the Army medical services was introduced. He asked the Minister to permit them to lay those views before him. They would not attempt to say what should be done, but, as they were interested in this matter and as they recognized the importance of an adequate voluntary service, they claimed that the success of the scheme would depend, to a large extent, on the acceptability of its provisions to the medical profession. They hoped to persuade medical men to enter the service. The Federal Committee wished to bring to his notice three points of importance. In the first place, the Committee regarded it as a necessity that the Director-General Medical Services should have the confidence and respect of the medical profession generally. To secure a man of this type it would be necessary to pay him a salary that would warrant him in forsaking his ordinary work and confining his attention to this position. In the second place, the Federal Committee held that it would be desirable for the Director-General Medical Services to have direct access to the members of the Military Board and not to be compelled to approach the Board through a third person. The third matter had reference to the rate of pay of medical officers. It was understood that on April 1, 1921, the military hospitals would be taken over by the Repatriation Department. They asked that the medical officers at the hospitals should be paid at the same rate as the medical practitioners now working for the Repatriation Department were paid and not at the military rates.

Dr. J. A. Dick expressed the opinion that it would be economical to appoint a good man to the position of Director-General Medical Services. He thought that the salary should be £2,000 with a minimum of, say, £1,500. It was also quite essential that the Director-General Medical Services should have free access to the Minister and to the members of the Military Board.

General Cuscaden said that it was the wish of the Repatriation Department that the Defence Department should carry on the hospitals until the number of patients was sufficiently small to enable them to be accommodated in civilian hospitals.

Dr. Hayward supplemented his remarks by asking the Minister to allow the Federal Committee to see the report on the reorganization of the Army medical services before it was finally adopted. They would be called upon to give advice to medical men in connexion with the services and it would make their task much easier if they were quite satisfied on all points.

The Minister said that he would consider this request. He wished again to look through the report before he gave a decision.

Dr. Dick stated that they had been informed that the Defence Department would conduct the military hospitals after April 1, 1921, on behalf of the Repatriation Department.

The Minister pointed out that the patients in the hospitals were "mixed." Some had been discharged and readmitted, while others had been discharged during their stay in hospital. His Department wished to close the mili-

tary hospitals and to induce the Repatriation Department to take over the institutions as civil hospitals. As soon as a patient was taken over by the Repatriation Department he was discharged from military service. The Repatriation Department was loath to adopt this procedure.

Dr. W. N. Robertson held that it would not be fair to pay the medical officers the military rates of pay. The Repatriation Department should pay the difference between the military rate and the rate paid to their own medical officers. Dr. Robinson referred to the case of a medical practitioner who wished to terminate his arrangement with the military authorities in order to resume his practice. The Defence Department was unwilling to give him his discharge. If they required good servants, they must be prepared to pay them adequately. The war was over and it was unjust to require the medical officers of the hospitals to continue to make financial sacrifices.

The Minister agreed with Dr. Robertson. He did not think that the Department had a right to ask medical practitioners to make sacrifices that others were not called upon to make. They were endeavouring to get the Repatriation Department to take over the hospitals. This had not been accomplished and in the meantime they could not let the soldiers suffer. He stated that his Department should not be responsible any longer.

The Minister stated that he was very glad to have received the deputation. When he had received the communication from the Federal Committee of the British Medical Association, he had suggested that they should make representations to the Committee dealing with this matter. He did not think that any suggestions had been made.

Dr. Hayward informed the Minister that Mr. G. A. Syme and Dr. R. H. Fetherston had appeared before the Committee and had expressed views similar to those that they had submitted.

The Minister said that the views of the deputation coincided to some extent with the recommendations of the committee of inquiry with the exception of the Repatriation matters. He recognized that to insure success for the citizen army, they would require the co-operation and goodwill of the British Medical Association and of the medical services throughout Australia.

In regard to the appointment of a Director-General Medical Services, he wished to say in the presence of the few gentlemen who had held that position during the war, that he was convinced that such an appointment was necessary. They could not expect to secure the services of competent practitioners during peace time at the salary they had been paying. He realized that the appointment should be part of the organization scheme. The time had arrived when the position should be filled. He had no doubt that the views of the deputation would carry considerable weight with his colleagues when he placed this matter before them.

He presumed that the proposal that the Director-General Medical Services should have access to the Military Board meant that he should have access to the particular member of the Board concerned. His experience during the war had convinced him that the Director-General Medical Services should have access to the members of the Medical Board both in peace and in war time.

The report of the committee of inquiry had been referred to the Military Board, but he did not think that the Board would oppose the findings of the committee.

In regard to the Repatriation Department, they did not have a free hand. They had to work in step with another Department. They were exceedingly anxious to terminate all the activities of the military hospitals. He was much surprised that the medical profession had not made more protest in regard to the salaries paid, as it was imposing on them. They should be paid on a civilian basis. He promised to take this matter up with his colleague, the Minister for Repatriation, and would certainly mention the representations made to him in regard to the salaries paid. The claim put forward was a just one and he would do all he could.

In conclusion, the Minister thanked the members of the deputation for their splendid services during the war and for calling on him and giving him their views on these matters.

Dr. Hayward on behalf of the deputation thanked the

Minister for receiving them and expressed appreciation of the sympathetic way in which he had listened to their representations.

THE TREATMENT OF DISCHARGED SOLDIERS.

Deputation to the Minister for Repatriation.

A deputation of members of the Federal Committee waited on the Honourable A. S. Rodgers, Acting Minister for Repatriation, on February 3, 1921, for the purpose of discussing the arrangements for medical attendance of discharged soldiers. The deputation consisted of Dr. W. T. Hayward, C.M.G., the Chairman of the Federal Committee, Dr. J. Adam Dick, C.M.G., Dr. W. N. Robertson, C.B.E., Mr. G. A. Syme and Dr. R. H. Todd.

Dr. Hayward explained that the local medical officers of the Department of Repatriation were required to give medical attendance to discharged soldiers for disabilities due to their war service. The rates of payment and conditions of service were in some respects unsatisfactory, especially in connexion with the provision for the payment of 2s. 6d. per visit under circumstances which in the future would arise more frequently than in the past. He asked that the following proposals should be substituted for the existing arrangements (see *The Medical Journal of Australia*, August 6, 1919, p. 141):

- | | |
|--|-------|
| (1) Where the patient visits the local medical officer's surgery for treatment or examination— | s. d. |
| First consultation, treatment or examination | 10 |
| Next four consultations (treatment) | 6 |
| Thereafter (treatment) | 5 |
| (2) Where the local medical officer visits the patient in his home or elsewhere: | |
| First two visits | 10 |
| Thereafter | 5 |
| (3) Mileage beyond two miles from the local officer's surgery— | |
| Per mile in day-time | 5 |
| Per mile in night-time, i.e., between 8 p.m. and 8 a.m. | 7 6 |

The terms "first visit" and "first consultation" shall be read to mean the first visit or consultation, as the case may be, as each series of attendances.

He pointed out that the Federal Committee had been in communication with the Repatriation Commission on the subject. He hoped that the Minister would be kind enough to give his attention to this matter. The medical profession had been eager and willing to render services during the war, regardless of the remuneration. It was neither reasonable nor fair that the medical profession should be asked to continue to accept nominal payment while other professions and classes were being paid by the Department for their services on a peace basis.

The Minister in reply stated that the Government recognized its indebtedness to the medical profession for the service of its members during the war and afterwards. He promised to go into the matter carefully with the Commissioners and the Chief Medical Officer. He could hardly, however, hold out a hope of giving a satisfactory answer during the current financial year, as all Federal expenditure had to be watched most carefully. In his capacity as Assistant Treasurer he knew the extreme difficulty of administering the finances at the present time. He hoped that the Committee would be satisfied if he got an answer that the new rates and conditions would come into operation at the end of the year, that is, after June 30, 1921. He would give the Committee his personal assurance that he would go into the matter carefully with the Commissioners and would do his best to see that the medical officers got a square deal.

Dr. Hayward, on behalf of the Committee, stated that the profession would be satisfied if the new arrangements came into effect in July.

Dr. Hayward then referred to the subject which the members of the Federal Committee had discussed with the Minister for Defence in connexion with the payment of medical officers at the military hospitals. He pointed out that the medical officers were receiving inadequate pay-

ment from the Defence Department for their services. They were paid according to their military rank. Majors received 30s. a day and Captains 22s. a day. The medical officers doing similar service for the Repatriation Department were receiving £2 10s. a day. They asked that when the Department of Repatriation took over the financial responsibility of the military hospitals, the remuneration of the medical officers should be increased to the rate paid by the Department of Repatriation.

The Minister replied that he had seen the newspaper report of the Deputation to the Minister for Defence and understood the position. It was the intention of the Repatriation Department to take over the whole of the medical side of the soldiers' requirements on March 31, 1921. After this date the Australian Imperial Force would be cut out and cease to exist. He promised to go into the matter of the remuneration of medical officers attending the military hospitals and would do what he could to put their remuneration on a civil instead of a military basis.

The Council of the Victorian Branch entertained the members of the Federal Committee and those attending the meeting of Directors of the Australasian Medical Publishing Company, Limited, at dinner at the Grand Hotel on February 1, 1921. Dr. C. Gordon Shaw, D.S.O., as Vice-President, received the guests in the place of Dr. Basil Kilvington, who was unable to attend. The floral decorations on the spacious table were delightfully artistic and served as a harmonious setting for the cordial hospitality of the members of the Council.

Among the toasts was one, proposed in very happy and appreciative terms by Dr. J. F. Wilkinson, in honour of Dr. R. H. Todd, the indefatigable and capable Honorary Secretary of the Federal Committee on the occasion of his appointment as representative of the Branches of the British Medical Association in Australia to attend the conference to be held in England in connexion with the relationship of the overseas Branches to the parent Association. Dr. Wilkinson indicated in well-chosen words the value of Dr. Todd's services to the British Medical Association and to the whole medical profession in Australia. The toast was received with enthusiasm. The members obviously determined to demonstrate to Dr. Todd their high appreciation of the important work he had performed during the course of many years and of the influence he had exercised on the profession. The honoured guest made an apt reply.

At a meeting of the Witwatersrand Branch of the British Medical Association held on December 16, 1920, it was resolved that the existing financial arrangements between the Branch and the South African Medical Association should be discontinued at the end of the year. An unsuccessful attempt was made to secure "some mutual financial arrangement" for the year 1921.

Obituary.

WILLIAM ANDREWS.

William Andrews, whose death occurred on December 2, 1920, was born in Melbourne on May 13, 1841. He was educated at a private school in Collins Street, Melbourne, and at one of the public schools. After leaving school he entered the Melbourne University and took his medical degree in 1886. In 1889 he gained the degree of doctor of medicine.

Soon after graduation William Andrews settled in practice in East Melbourne. He remained in active practice without leaving the district throughout his long career. For many years he held the position of honorary physician to out-patients at the Melbourne Hospital. He was for some time a member of the Melbourne City Council and was one of the representatives of that body on the Board of Management of the Queen's Memorial Infectious Diseases Hospital. He was a prominent freemason, a member of the Davies Lodge and a holder of high office in the United Grand Lodge of Victoria.

His extra-professional interests were chiefly literary. In

his younger days he was a frequent contributor to the press on literary and political subjects. He is survived by one married, and one unmarried daughter and one son, Dr. W. A. Andrews, of Wellington Parade, East Melbourne.

Correspondence.

SUPERVISION AND REGISTRATION OF MIDWIVES.

Sir: Dr. Purdy's interesting paper in respect to the above subject opens a field for discussion regarding the greatest danger in our midst, viz., the unregistered "nurse."

Surely the time is ripe and the qualified nurses of New South Wales have a moral right to expect the medical profession to refuse attendance on midwifery cases except when a trained nurse is in attendance.

In country districts this is not always practicable and one must accept what is offered; but in the metropolitan area there is no room and no excuse for the "Gamp." Each district has its "nurse who knows more than any trained nurse or doctor"; and it is up to the profession to rouse itself and root out the evil. The writer has always refused attendance in these cases, only to find that many men are still willing to accept the responsibility of cases with these so-called "nurses" and, incidentally, increase the maternal and infant mortality. I think the profession could materially assist in this matter by making it unethical for a member of the Association to attend any confinement except with a duly qualified nurse. The public have a right to expect it and our trained nurses, on whom we depend so much, have at least a right to our protection.

Yours, etc.,

"M.B. CH.M."

February 1, 1921.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xiv.

Alfred Hospital, Melbourne: Various Vacancies on the Medical Staff.

Military Forces of the Commonwealth, 2nd Military District, Medical Officers for Camps.

Department of Public Health, New South Wales: Bio-Chemist.

Croydon District Hospital, North Queensland: Medical Officer.

Pelaw Main, Richmond Main and Stanford Merthyr Collieries, New South Wales: Medical Officer.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
NEW SOUTH WALES. (Hon. Sec., 30-34 Elizabeth Street, Sydney.)	Australian Natives' Association. Ashfield and District Friendly Societies' Dispensary. Balmain United Friendly Societies' Dispensary. Friendly Society Lodges at Casino. Leichhardt and Petersham Dispensary. Manchester Unity Oddfellows' Medical Institute, Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. North Sydney United Friendly Societies. People's Prudential Benefit Society. Phoenix Mutual Provident Society.

Branch.	APPOINTMENTS.
VICTORIA. (Hon. Sec., Medical Society Hall, East Melbourne.)	All Institutes or Medical Dispensaries Manchester Unity Independent Order of Oddfellows. Ancient Order of Foresters. Hibernian Australian Catholic Benefit Society. Grand United Order of Free Gardeners. Sons of Temperance. Order of St. Andrew. Australian Prudential Association Proprietary, Limited. Mutual National Provident Club. National Provident Association.
QUEENSLAND. (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Australian Natives' Association. Brisbane United Friendly Society Institute. Stannary Hills Hospital.
SOUTH AUSTRALIA. (Hon. Sec., 3 North Terrace, Adelaide.)	Contract Practice Appointments at Renmark. Contract Practice Appointments in South Australia.
WESTERN AUSTRALIA. (Hon. Sec., 6 Bank of New South Wales Chambers, St. George's Terrace, Perth.)	All Contract Practice Appointments in Western Australia.
NEW ZEALAND: WELLINGTON DIVISION. (Hon. Sec., Wellington.)	Friendly Society Lodges, Wellington, New Zealand.

Diary for the Month.

- Feb. 22.—N.S.W. Branch, B.M.A., Medical Politics Committee; Organization and Science Committee.
Feb. 23.—Vic. Branch, B.M.A., Council.
Feb. 24.—S. Aust. Branch, B.M.A..
Feb. 25.—Q. Branch, B.M.A., Council.
Feb. 25.—Central Southern Med. Assoc. (N.S.W.) Annual Meeting, Goulburn.
Feb. 25.—Q. Branch, B.M.A., Council.
Mar. 1.—N.S.W. Branch, B.M.A., Ethics Committee; Executive and Finance Committee.
Mar. 2.—Vic. Branch, B.M.A..
Mar. 3.—N.S.W. Branch, B.M.A., last day for nomination of candidates for election to the Council.
Mar. 4.—Q. Branch, B.M.A..
Mar. 8.—Tas. Branch, B.M.A..
Mar. 8.—N.S.W. Branch, B.M.A., Medical Politics Committee; Organization and Science Committee.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated. All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney. (Telephone: B. 4835.)